

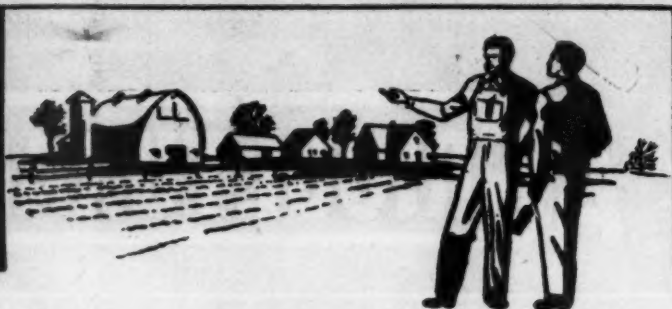
The **AGRICULTURAL EDUCATION** *Magazine*



Feature

Program

The Agricultural Education Magazine



A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by Interstate Printers and Publishers, Danville, Illinois.

THE INTERSTATE  DANVILLE, ILLINOIS

MANAGING EDITORS

- A. H. Krebs, University of Illinois, Urbana, Illinois
Editor
W. A. Smith, Cornell University, Ithaca, New York
Consulting Editor
Henry TenPas, Oregon State College, Corvallis, Oregon
Business Manager

SPECIAL EDITORS

- CENTRAL**
Ralph J. Woodin, Ohio State University, Columbus, Ohio
Arthur B. Ward, University of Nebraska, Lincoln, Nebraska
NORTH ATLANTIC
Joe P. Bail, Cornell University, Ithaca, New York
Paul M. Hodgson, University of Delaware, Newark, Delaware
PACIFIC
S. S. Richardson, Utah State College, Logan, Utah
Howard Christensen, University of Nevada, Reno, Nevada
SOUTHERN
J. C. Atherton, University of Arkansas, Fayetteville, Ark.
T. W. Gandy, Alabama Polytechnic Institute, Auburn, Ala.
A. J. Paulus, University of Tennessee, Knoxville, Tenn.
AT LARGE
Robert Howey, Sycamore, Illinois
Teachers
Gerald B. James, North Carolina State College
Book Reviews
H. N. Hunsicker, U. S. Office of Education, Washington, D. C.
Vocational Division

SPECIAL REPRESENTATIVES

- Southern, E. W. Garris, Gainesville, Florida
North Atlantic, John A. Snell, Augusta, Maine
Central, Harold B. Taylor, Indianapolis, Indiana
Pacific, Ralph W. Canada, Fort Collins, Colorado
N.V.A.T.A., George Buchanan, Frankfort, Kentucky

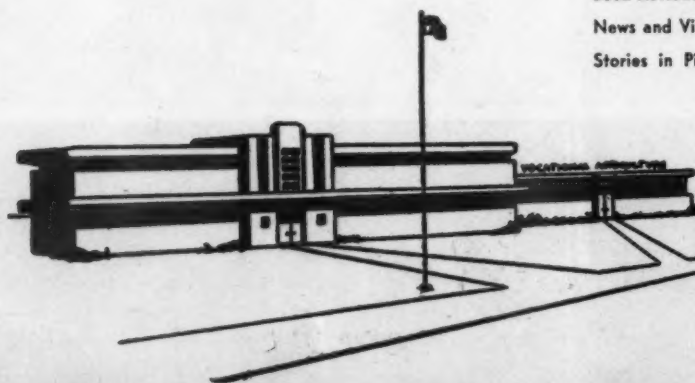
EDITING-MANAGING BOARD

- E. W. Garris, Florida; John A. Snell, Maine; Harold B. Taylor, Indiana; Ralph W. Canada, Colorado; George Buchanan, Kentucky; W. T. Spanton, Washington, D. C.; G. P. Deyoe, Illinois; Luther Hardin, Arkansas; Henry TenPas, Oregon; W. A. Smith, New York; A. H. Krebs, Illinois.

Contents

Editorials

Plan or Drift.....	Charles W. Hill.....	243
From the Editor's Desk.....		243
Summer Adult Farmer Program.....	Lloyd J. Phipps.....	244
Making Hay while the Sun Shines.....	H. Glenn Fogle.....	245
Effective On-Farm Instruction for Young and Adult Farmers.....	L. B. Fidler.....	246
Improving Future Farmer Exhibits.....	P. F. Pulse.....	247
Making On-Farm Instruction Contribute to the Young Farmer's Individual Farming Program.....	Arthur P. Bell.....	248
The Cover Picture.....		248
Integration in Agriculture.....	Dewey K. Brumbaugh.....	249
Summer Preparation and Organization of Facilities for the Coming Year.....	D. A. Storms.....	249
About the Preparation of Teachers of Agriculture (What Do Studies Show?).....	Henry S. Brunner.....	251
How Far Shall We Go in Farm Mechanics?.....	Robert E. Bennett.....	254
Relation between High School Vocational Agriculture Training and Status of Graduates in Nonfarm Occupations Related to Farming.....	Don N. Christensen.....	256
Daytime Out-of-School Classes.....	Duane Everett.....	258
A Ten-Year Study of Former Students of Vocational Agriculture in Six Reorganized Districts in Missouri.....	Amos B. Rougeau.....	259
Why Did Johnny Quit Vocational Agriculture?.....	Philip E. Schmidt.....	260
Relation between Home Characteristics of Farm-Reared Male High School Graduates and Their Status in Nonfarm Occupations.....	Carl Wells.....	260
Book Reviews.....		262
News and Views of the Profession.....		263
Stories in Pictures.....		264



Subscription price, \$2.00 per year, payable at the office of the Interstate Printers and Publishers, 19-27 N. Jackson St., Danville, Illinois. Foreign subscriptions, \$2.25. Single copies, 20 cents. In submitting subscriptions, designate by appropriate symbols new subscribers, renewals and changes in address. Contributions should be sent to the Special Editors or to the Editor. No advertising is accepted.
Second-class postage paid at Danville, Illinois.

Editorials

Plan or Drift

CHARLES W. HILL, Teacher Education, Cornell University

Today more than any time in the past, the teacher of vocational agriculture is caught in a conflict as to what he should do in the summer. Have we decided or do we know just what should be done in the summer? Briefly, let us look at the situation facing many teachers. We have said that teachers should spend the summer in (1) planning a program of vocational agriculture, (2) teaching pupils, young and adult farmers primarily through individual on-farm instruction, (3) improving and maintaining facilities for teaching, (4) performing public relations activities, and (5) improving our professional ability to perform the job. Most people would agree with the above as desirable areas for the summer work. The major problem facing the teacher is the selection of a balanced program rather than a narrow program of public relations and professional improvements.

This is what happens to many teachers. One week is needed for the annual conference; another week is spent at the state FFA convention or camp. Two or three weeks are spent in summer school to meet certification requirements. Local, county, and state fairs along with preparation for them use up another week or two. Then there are field days, tours, judging contests, county or district meetings, and other diverse activities. The summer vacation must be added to the list. How much time do these activities consume? How many weeks remain for individual on-farm instruction? What is the solution?

The teachers are blamed for not selecting the proper activities and for the inefficient use of their time. Should the teachers bear all the responsibility for this situation? The teacher trainers and supervisors have contributed to this problem. Teacher trainers encourage summer school attendance, attendance at workshops, field days, judging contests, etc. Supervisors, likewise, encourage the teachers to participate in professional meetings, fairs, judging contests, camps, etc. The problem is one that will require the combined thinking and efforts of teachers, teacher trainers, supervisors, and the local school administration. What have we done as a group to resolve the problem?

In my opinion, progress toward a solution to this problem could be achieved in this manner. All parties concerned should sit down together to work out a solution. We would need to decide what objectives in vocational agriculture can be achieved in the summer? Next, what methods, activities, and work are necessary to achieve the objectives. Then, plan and organize the

From the Editor's Desk . . .

Something to fight for - - -

Some parts of the general educational program have a sufficiently strong root in tradition and public acceptance to survive almost any attack. Other parts of the educational program provide direct educational service to only a small part of the public and are consequently more vulnerable to attack, especially if there exists no strong root in educational tradition. The summer employment of teachers of vocational agriculture is one of the most vulnerable parts of the educational program. It is especially important, therefore, that we take positive action to make certain that what we do in the summer is of sufficient value to the public to make the public willing to fight actively to keep it.

One of the first steps we need to take is that of planning and submitting to the administrator and school board a definite summer program. This is especially true for those situations where the main local administrative concern seems to be the delivery of the monthly check.

We need also to take some action as a professional group to put pressure on some of our number who prefer to build houses or rest during the summer. One possibility is to hold a joint county or section administrator-vocational agriculture teacher meeting at which problems of planning summer programs are discussed. Another possibility is to prepare a typical summer program to send to all administrators along with a questionnaire asking for comments as to the adequacy of the program and ideas for improving it.

Most of all, however, we need to face squarely the fact that much of our summer work is busy work. We need to discover and concentrate on the things people in our communities value most. We must devote most of our time to doing things people will miss if they are not continued and things which people can't ignore. In this respect, the teacher should be unusually well informed during the summer for on-farm consultation with adult farmers regarding current problems. Adult and young farmer courses in the summer will not only involve groups and on-farm instruction, but they are unusual enough to attract attention from the non-farming public. The brave teacher might even consider summer courses for landlords (or landladies).

There is, of course, a limit to the amount of time available in the summer. Some of our present activities will have to be curtailed or eliminated. We must, however, turn our attention to summer activities of recognizable value to our communities. We must give them something of value to fight for. □

For busy teachers and farmers, try a - - -

Summer Adult Farmer Program

LLOYD J. PHIPPS, Teacher Education, University of Illinois



Lloyd J. Phipps

THE SUMMER period is an excellent time to emphasize various types of educational activities for young and adult farmers. In the summer, the teacher is not burdened with a regular schedule of class meetings of high school courses. The rigidity of his schedule is reduced considerably. He is free to utilize his time on those activities which he considers most important.

Unfortunately, little time during the summer is usually devoted to the educational program for young and adult farmers. Many teachers devote some time during the summer to the following:

1. Planning for young and adult farmer courses.
2. Planning and conducting on-farm instructional visits to young and adult farmers.
3. Preparing for young and adult farmer courses.

Only a few schools conduct their young and adult farmer courses on a year-round basis so that some of the young and adult farmer class meetings are held during the summer.

Those schools that have planned their young and adult farmer courses on a year-round basis have proved that it is possible to get attendance at summer class meetings. They have also proved that summer class meetings in a course have many advantages over class sessions during the other seasons of the year.

A very important advantage of summer class meetings from the teacher's point of view is the time he has to prepare for them. A teacher usually has much more time in the summer to organize class meetings, notify class members, prepare teaching plans, set up demonstrations, collect and organize teaching aids, and obtain audio-visual aids than he does during the periods of the year when he is also teaching regularly scheduled high school courses.

Another very important advantage for the teacher is the psychological effect of the summer class meet-

ings on the community. In many rural farming communities, the only teacher job that is considered as work is the task of teaching a class. Desk work involving the preparation for teaching, the ordering of audio-visual aids, the collecting and organizing of materials and so forth are considered by many farmers, who seldom engage in desk work, as little more strenuous than loafing. In fact, many farmers consider on-farm instruction as an especially desirable form of loafing. After all, a farmer is often isolated from others for long periods and the opportunity to make visits to farms doesn't look like work to him.

One way of emphasizing the importance of the summer work of the teacher of vocational agriculture is to emphasize summer class meetings for young and adult farmers. When farmers attend class meetings in the summer, they have evidence that the teacher is on the job and earning his salary.

Summer class meetings also have advantages other than the advantages accruing to the teachers. They provide opportunities for certain types of functional teaching that are not available in any other way or at any other time. In the summer, crops and livestock are growing rapidly. The interest of farmers in their farming activities is at a yearly high. The opportunities for evaluation activities and problem solving are unlimited. The opportunities for using real objects in visual presentations are almost ideal. If functional, meaningful and outstanding teaching cannot be provided in summer class meetings, it cannot be provided.

Why have summer class meetings in adult and young farmer courses been neglected or avoided in vocational agriculture? Why is it traditional in many communities for the young and adult farmer courses to meet only in the winter?

Some believe it unwise to schedule class meetings for farmers during the summer because farmers are too busy to attend. Are farmers too busy to



Field observations as a part of summer class meetings create interest and "point up" problems in courses for adult farmers. (Photo by H. Engelking, Ill.)

attend class meetings in the summer? The Extension Service and the Soil Conservation Service personnel do not hesitate to schedule meetings for farmers during the summer. In some counties a very important part of the total program of the Extension Service is the meetings scheduled in the summer.

An increasing number of schools are conducting their adult farmer courses on a year-round basis with a number of class meetings in the summer. These schools are obtaining encouraging results. They are finding that farmers will attend in the summer and that the outcomes of summer class meetings are excellent. Of course, some farmers enrolled in a course may be forced to miss one or more of the summer class sessions because of field work, but farmers often have to miss class sessions in the winter because of bad weather or roads. Irregular attendance in the winter due to illness is also usually greater. Teachers have found that the percentage of attendance at class sessions in the summer is usually as good as it is at class sessions in other seasons of the year.

Types of Activities

What kinds or types of class activities are best for summer meetings of a course? Farmers dislike summer meetings that start after dark and are held in a classroom. Why is this the situation? Probably farmers dislike class meetings held in the school because classrooms in the summer are often uncomfortable. They usually are not equipped with screens and the bugs in an unscreened room on a summer night can be very annoying. After being closed during the day, a classroom on a summer evening can also be very hot, stuffy, and generally uncomfortable.

Most farmers, however, do like

(Continued on page 250)



Committee meeting at the State FFA Leadership Training Conference and State Convention.



Three boys from the Buffalo Valley Chapter examining an old tractor at the State Fair.

Teachers believe in . . .

Making Hay while the Sun Shines

H. GLENN FOGLE, Vo-Ag Instructor, Kenova, West Virginia

The summer program is a very vital part of the Vo-Ag program as a considerable amount of the farming work is done in the summer. In fact, it can and should be the most important part of the work as more individual help can be given to the boy on his own farm under his own conditions. The problems can be solved more often at the time and under the conditions where they arise.

D. P. Plymale and I are the teachers in the two-man department at Buffalo Valley High School. We work very closely in planning and carrying out the summer program. We make a joint plan and contact each other often during the summer. We do some work together such as making out reports and working on various projects needed by the department.

We make a plan for our summer activities using the forms sent out by the Vocational Agriculture Service of the State Department of Education. We generally complete it within a week of the time that we receive the forms. In fact, the activities that apply to the FFA have been decided by the members in regular meetings. Such things as the time and place of meetings, picnic, and summer tours are decided before school is out. Some of the other activities are determined by action of groups such as the Agricultural Workers Council in our county, the Extension Service and others.

Our plan is concerned with five items: 1. Supervised Farming, 2. Departmental Work, 3. FFA Leadership, 4. Professional Improvement, and 5.

Public Relations and Community Service.

Supervised Farming

We spend as much time in visiting the boy on his farm as practical. To assure visiting each boy soon after school is out, we keep their record books and take them to their homes. Other visits are based on the needs of the individual student and in a manner that gives us good use of the miles traveled. We try to visit each student three times during the summer and we also visit as many of the incoming freshmen as possible. We let the boys know that they can reach us by telephone if necessary.

The young farmer class is continued during the summer months including the regular meetings and supervisory visits.

Departmental Work

Special work needed in the department that could not be done during the school year is completed during the summer. Reference materials are sorted, filed, and new ones added. The necessary reports are made and sent to the proper agencies. Some equipment is made and some is re-conditioned.

One activity that we find helpful to our boys and to farmers in our community is to keep the shop open one day each week so that they can come and use it. Generally, Monday is the day selected. If work is not pressing at that time with the boys or farmers, the time can be spent in making needed improvements in the shop.

FFA Leadership

The FFA is active during the summer. Meetings are held at least once a month with the dates and details worked out by the members before school is out in the spring. At least one enterprise tour, combined with a conservation tour, is held. We have had our most successful tours during early August but have tried others in June and July. The summer picnic is held in July. All the boys that we are permitted to take attend the State Convention and Leadership Conference. As many boys as we can interest in camp are taken to the FFA-FHA Leadership Camp at Ripley. We also send our quota to the Conservation Camp at Camp Caesar. The chapter secretary sends cards announcing special events such as meetings, picnics and tours.

The various fairs, including the W. Va. State Fair, take considerable time but we feel that they are important. The exhibits that the boys prepare and enter are very important to them and provide incentives for better work.

Professional Improvement

The Vo-Ag Teachers' Conference is very worthwhile and takes the greater part of a week's time. The information presented about new ideas, improved practices, new teaching materials, and new equipment are helpful during the next year. The farm mechanics workshops are very helpful and are attended when within our part of the state.

The Agronomy Field Day held each year at the University Sub-station at Pt. Pleasant, in our immediate area, is never missed unless absolutely necessary. We generally take from 8-12 or more vo-ag students and young

(Continued on page 250)

Effective On-Farm Instruction for Young and Adult Farmers

L. B. FIDLER, Supervisor, Ohio

Effective on-farm instruction depends upon two factors: the amount of time devoted to it, and how the time is used.

The veterans' farm training program has centered attention upon the on-farm phase of vocational agriculture teaching for adults and young farmers. That program requires one half as many hours for the on-farm instruction as for the class instruction. Many think this proportion is too high; however, it does serve to emphasize, by contrast, the almost insignificant amount of time devoted to on-farm instruction in our regular vocational agriculture program of instruction for young and adult farmers.

The recent "Cooperative Study of Institutional On-Farm Training In The Central Region," involving replies from 11,299 veteran young farmers, records the fact that 33% of these young men favored farm visits from the instructor every two weeks; 43% of these men preferred monthly visits; and only 4% thought a visit every three months would suffice.

Ohio teachers are giving increased attention to on-farm instruction for out-of-school students. Summaries compiled from the teachers' annual reports over the past four years show that the average annual number of farm visits to adult farmers has increased from 1.4 to 3. Undoubtedly, this increased amount of visitation is, at least partially, due to the new State Foundation Plan which provides more free time for visitation for most of the teachers.

A new "Ohio Five-Year Program" emphasizes, not only an increase in the number of visits, but a more effective seasonal distribution of the visits which would assure a visit by the instructor during each three-month period.

Some Ohio teachers visit far in excess of the state average which, of necessity, means that some fall below it. One teacher, whose 1957-58 report was recently studied, reported an average of seven visits per adult student; 50% of his students received more than six visits. Similar reports from two other teachers showed averages of four visits and six visits.

On the first factor, "amount of time" devoted to on-farm instruction, it seems evident that we in Ohio have not yet approached the desirable minimum amount of time which should be spent on this phase of the vocational agriculture program.

In regard to the second factor, "how the time is spent" during on-farm instructional periods with adults and young farmers, unfortunately we in Ohio have little objective information; nor are we sure we know how it should be spent. We are, however, giving the matter attention and some facts seem to be emerging.

In a recent interview with a good teacher the question was asked, "Under what circumstances do you consider that you can do the most effective on-farm instruction with your young farmers?" Unhesitatingly the teacher answered, "When results can be checked against recommendations." A further discussion revealed that this teacher strongly favored some sort of objective survey and a series of enterprise goals and suggested practices for achieving them. He uses such a form with his young farmers. He further suggests experimentation and demonstrations with accurate yield or production checks. All of his young farmers who have dairy herds are members of the D.H.I. Association. Others are in a 100 bushel corn club.

This teacher's young farmer group has organized a "Young Farmer Point System for a Local Master Farmer Degree." This point system emphasizes objective goals for all of the major enterprises engaged in by the group. Incidentally, this teacher stated that he thought visits should be made at least every two months.

Fifteen Ohio teachers indicated interest in trying a special "Individual Farm Survey with Goals and Suggested Practices." This is a device adapted for use with young and adult farmers. One teacher in commenting on the form stated, "The form will



This Ohio teacher is doing some figuring of dairy production costs with one of his adult farmer class members.

give me more tangible material for visits to young men's farms, and that I need seriously." Several other teachers have commented favorably on the device as an aid to more effective on-farm instruction.

Another aid to effective use of time, during the on-farm instructional period, is pre-planning. Teachers are divided in their attitude towards planning farm visits in advance. Most certainly it is not possible in every instance, but teachers who use the plan seem to uniformly agree that a planned visit for farm instruction is far more effective and satisfying than a hit and miss visitation. The form mentioned above does not assure pre-planning. However, if it is carefully and systematically used, it will practically assure that there will be some subject of common knowledge and interest to be discussed by the teacher and student on every farm visit.

Summarizing: 1. It appears certain that more effective on-farm instruction could be done if teachers could visit the farms of their young and adult farmers oftener. A reasonable goal in most cases might be one visit every two months.

2. Most effective on-farm instruction is practically assured in cases where the teacher and student have surveyed the farm situation, have clearly recognized the problems, and have set up some objective goals and general plans for achieving them. These general plans can center around enterprise planning and records, farm surveys and goals, general farm account records, enterprise contests, or any other similar device. The important point is that it shall focus the attention of the student and the teacher upon personal problems of the student and challenges them jointly to their solution. □



F. J. Ruble, who is in charge of Future Farmer activities at the Ohio State Junior Fair, checks the entry of an FFA booth exhibit. Ruble says that this is an example of a desirable exhibit.



Future Farmers can do a good job of building exhibits depicting the work of their chapters. These two Ohio future farmers have just completed this exhibit at the Ohio State Junior Fair.

There are many ways for - - -

Improving Future Farmer Exhibits

P. F. PULSE, Teacher Education, Ohio State University



P. F. Pulse

"THERE'S nothing new under the sun!" This may be a true statement; however, after you have developed what seems to you to be an original idea into an appealing, attractive

exhibit, you know there is a difference between you and those who say, "You know, I had that idea last year or several years ago." There is a great difference. You developed the idea, while those making the comments did nothing about it. This seems to be a desirable philosophy for teachers of vocational agriculture to keep in mind when faced with the task of preparing exhibits in connection with their work.

Observations by the writer would seem to indicate that there is little value in exhibiting crops for display "as window dressing." However, if they can be used to tell a story of achievement in relation to cultural practices, then they appear to have real meaning to the viewing public.

In the livestock area, there is always need for improvement of quality. Fairs offer the best opportunity for the breeder and exhibitor to adjust his ideals as to acceptable present day types and market classes. With this improvement in quality, there needs to be more attention in fitting and showing. In fact, many inferior animals have been shown to cham-

pionships merely because of the ability of the person on the halter. The dress or appearance of the exhibitor should not be overlooked. Many times the chances for an otherwise top rating are ruined due to careless or improper dress or manners of the exhibitor.

In the case of demonstrations, consider the interests of the audience. Confine the demonstration to a small segment of a job or project. Get across to the audience early why this is important. Use only two to four people; large numbers detract from the effectiveness. One member should serve as master of ceremonies, with each member of the team having a definite responsibility. Always use a large sign giving the title of the demonstration, with a flannel board or similar device upon which the steps may be listed. Remember, the audience is much more interested in the team's performance than the information they impart. So demonstrate! Don't just talk about it and rely on the printed material of the visual aids to impart the ideas to the audience.

In the area of farm mechanics exhibits, the quality of workmanship seems to offer the greatest opportunity for improvement. Design of the projects, usefulness under present day farming conditions, color and finish all need attention.

Educational exhibits portraying a single area of the FFA chapter's activities appear to be the best way to attract and arouse interest in the FFA program. These areas might be com-

munity service, conduct of meetings, conservation, cooperation, earnings and savings, farming program, leadership, safety, and scholarship.

The following score card for judging such exhibits has been developed over a period of the last thirty years at the Ohio State Fair.

- A. Power to attract attention—30 points
 1. Presents an original, appealing, attractive display. (15 points)
 2. Uses life, motion, color, or light without detracting from the one FFA idea being displayed. Any life, motion, color, or light should harmonize with the FFA colors and focus on the idea presented. (15 points)
- B. Power to arouse and hold interest—30 points
 1. Informs the public concerning achievements of the chapter. (15 points)
 2. Develops curiosity or recalls experiences of the average person. (15 points)
- C. Development of exhibit—60 points
 1. Features one area of FFA activity. (20 points)
 2. Shows specific chapter's activities or accomplishments. (20 points)
 3. Is adequately labeled, including chapter name and area of activity displayed. (10 points)
 4. Presents generally favorable appearance. (10 points)
 - a. Charts, maps and other illustrative material arranged artistically.
 - b. All printing, lettering and decorations are neat and

(Continued on page 248)

Making On-Farm Instruction Contribute to the Young Farmer's Individual Farming Program

ARTHUR P. BELL, Teacher Education, Agricultural and Technical College, Greensboro, North Carolina



Arthur P. Bell

Individual on-farm instruction is an essential feature of the young farmer's program. It should be given on the young farmer's farm where he and the teacher can see the problems in their natural setting.

This on-the-job training can determine the young farmer's success or failure, depending upon the teacher's ability to work individually with the young farmer.

The teacher has a great responsibility in providing individual on-farm instruction. It is the teacher in whom the young farmer places his confidence, therefore, he (the teacher) should not rely on assumptions or guesses. He should make sure that he understands the young farmer's situation accurately and that he analyzes his problems and needs correctly. He must not only encourage and guide, but also inform and train if he is to help the young farmer accomplish his objectives. He should recognize that individual instruction is concerned both with the whole farm as a unit and with the personal welfare of the young farmer and his family. The instruction should be so designed that it leads the young farmer to analyze his own situation, to consider all the facts, and to reach his own conclusions. I believe that too often teachers are inclined to urge the adoption of certain standard practices without fully considering their effect on the total farm program and family living. In this way the instruction may be harmful.

A young farmer may have developed the ability to solve his problems and he may understand the procedures necessary to increase his proficiency in farming or to make progress toward satisfactory establishment, yet he may not make any improvement in his situation. Failure to act may be due to a lack of sufficient urge and motivation, or lack of necessary attitude on the part of the young farmer to cause him to carry out the practices which he knows would result in in-

creased production and increased proficiency.

The success of the teacher in making his on-farm instruction contribute to the young farmer's individual farming program depends upon his ability to arouse in the young farmer an impelling desire to act. It is the responsibility of the teacher to organize the instructional program in such a way as to enable the young farmer to plan and develop a farming program which will be continuous and functional.

The success of the individual on-farm instruction depends to a great extent upon satisfactory arrangements made by the teacher in connection with such visits.

Before making a visit to the farm the teacher should:

1. Arrange to make the visit at an appropriate time of the day.
2. Plan the visit in advance and notify the young farmer as far as practical.
3. Review the information on file about the young farmer and his program.
4. Make a list of additional facts to be secured about the young farmer and his program, such as his situation, progress, new problems and objectives.
5. Be prepared to do something for and with the young farmer.
6. List possible solutions to questions the young farmer may raise.
7. List future plans and improvements and expansions needed in the young farmer's farming program which should be discussed during the visit.
8. Know the agricultural situation of the community.

After arriving on the farm the teacher should:

1. Greet the young farmer and members of his family.
2. Be sociable, but keep the conversation and activities centered on solving problems for the young farmer.
3. Determine the young farmer's interest if it is not known.
4. Use tact in getting information.
5. Render emergency service when practical. Common sense should be the guide here.
6. If the young farmer's parents own the farm, counsel with them.

7. Guide the young farmer in solving his problems rather than advising him to adopt new practices or make changes without showing him why.
8. Make every reasonable effort to give the young farmer something worthwhile.
9. Congratulate the young farmer on the good things he has done and let him know how you feel he is getting along.
10. Help the young farmer evaluate what he is doing—his progress, plans, practices, shortcomings, etc.
11. Acquaint the young farmer with the significant things that need to be done next in order to carry out his farming program and long-time farm and home plan.
12. Point out sources of additional information and help that are available for solving special problems.
13. Do not make the visit too long unless there is a good reason for doing so.

The teacher should make every effort to get the young farmer to see, through his on-farm instructional program, that the solution of his problems through introduction of certain changes and approved practices will bring him worthwhile satisfaction. □

Improving Future Farmers - - -

(Continued from page 247)

attractive. (Crepe paper does not hold up and may seriously detract from exhibit.)

- c. FFA colors are preferred in exhibit.

Remember, the power of exhibits to attract people and portray ideas is largely dependent upon ample signs guiding them to the various places where the exhibits can be found. The use of lighting effects, color, action, and originality of ideas portrayed are all important. □

The Cover Picture

Bob Riley, vocational agriculture student, Shelton, Nebraska, is indulging in a little fun during a supervisory visit by his vocational agriculture teacher, Harold Dissmeyer. Luckily, Teacher Dissmeyer had a camera along to make a permanent record of the display. □

Integration in Agriculture

Implications for vocational agriculture

DEWEY K. BRUMBAUGH, Vo-Ag Instructor,
Ebensburg, Penn.

One answer to integration and its far reaching implications as it touches students and teachers of vocational agriculture may be in renewed effort to teach through cooperative efforts on the part of students of vocational agriculture. This can best be done by encouraging students to locate a common market and to meet the demands of the market with a uniform product. This means that volume, quality and latest marketing techniques must be taught if success is to be realized. This past season, the students of vocational agriculture at Central Cambria High School, Pennsylvania, marketed 1,500 bags of sweet corn through the cooperative efforts of 15 students. This was the outgrowth of

the previous season's work when three students marketed 300 bags cooperatively with tremendous success. Cabbage bags are purchased through the winter months as sweet corn projects are planned. Spray programs, fertility practices and other approved practices are "musts" as quality is stressed. Corn is packaged 5 dozen to a bag, and shipped to market. It is important, however, that the agriculture teacher check the quality of each shipment and maintain a high standard of quality. One bad shipment



A shipment of sweet corn being loaded. (Ebensburg, Penn.)

can be embarrassing for everyone.

Even in a year when sweet corn was plentiful and prices low, nearly all students showed a profit. Those with highest quality had the highest profit. All sweet corn sold cooperatively is sold through the FFA with each student receiving his share after deductions for bags and other marketing costs. □

Summer Preparation and Organization of Facilities for the Coming Year

D. A. STORMS, County Supervisor, Plant City, Florida



D. A. Storms

TOO much emphasis cannot be placed on the importance of careful planning in order to accomplish all the things planned for the summer program. Many things are left until the summer

and land laboratory plots look during the summer months. The public judges an agriculture teacher by his services to the community and the appearance of his school premises.

Important areas of consideration in summer planning for a successful school term are the farm mechanic shop, the reference material, the land laboratory or school farm, the classroom instruction, the Future Farmer program, the adult training program, community service, and public relations.

In this day of farm mechanization, the shop training geared to the needs of the farm is very important. Time is needed to check, replace and repair tools and equipment, replenish expendable tools and supplies, and restock materials furnished to the students. Fire extinguishers should be recharged, if needed, and first aid kits checked and refilled. The teaching program for the shop should be revised to meet changing needs of the



A. H. Hollenberg, Shop Specialist, U. S. Office Education, Washington, D. C., conducts class in tractor maintenance for teachers in the Plant City, Florida, Agriculture Department.

community. Repainting of cabinets, safety zones, walls and equipment should be done if needed.

As regular textbooks are not ordinarily used in the classroom, the teaching aids cannot be stressed too much. The bulletin files should be checked, replacements made for bulletins missing, and lists checked for new bulletins available. New reference books, film strips, and slides should be ordered. A calendar for ordering projector films should be made so as to have them on hand when needed. Charts and other teaching aids should be considered.

The land laboratory or school farm, when used by agricultural education departments, requires the time of the agricultural teacher during the summer months though generally in a managerial or supervisory capacity.

(Continued on page 250)

months to be done when classes are not in session and the teacher can give full time to them. In order to properly plan a program that is to be completed before school starts in the fall, a definite day by day schedule should be adopted. Certain fixed obligations for summer time have to be considered such as time out for teachers' conferences and state conventions. The balance of the time should be budgeted to give consideration to the most important things affecting preparation for the coming school term. Boys having projects in operation should be visited, new students should be contacted. As agriculture teachers generally are paid the year around there should be evidence of this in how the premises

Summer Preparation - - -

(Continued from page 249)

Generally there is considerable maintenance work to be done such as painting, fence and building repair and upkeep of the grounds. In cases where livestock and poultry are kept, this requires supervision. Keeping the premises of the farm and the grounds of the agricultural building looking nice is of utmost importance.

The effective use of the classroom requires revising and bringing up to date teaching plans and seeing they are properly filed. Checking filing systems and condition of audio-visual aids is important as well as checking the condition of classroom furniture. A complete list of needed report forms should be on hand with dates due posted in a conspicuous place. Preparing the program of work for the coming year is done with consideration for seasonal sequence of jobs taught.

Contact should be kept with in-school and out-of-school Future Farmers through regular meetings held during the summer months. Arrangements have to be made to send delegates to state conventions and training camps. Some states have forestry training camps during the summer months for FFA members. The summer months give the teacher opportunity to visit prospective new FFA members and their parents and explain the agricultural education and Future Farmer program. Necessary supplies for the FFA chapter should be ordered such as secretary and treasurer books, FFA manuals, parliamentary procedure books and other needs.

Many agriculture teachers have adult and young farmer classes during the summer months which allows more time for lesson planning and visitation. There is also more time for surveys of community needs and evaluation of work done.

Agriculture teachers are noted for their service to their communities in many different ways. Activities in church life, civic clubs, chambers of commerce, fair associations, garden clubs, and PTA's are some of the ways agriculture teachers assist the community. The summer months give the teacher time for contacts and committee meetings. Many teachers are assisting with Boy Scout camping trips during the summer.

Acquainting the public with the agricultural education and FFA program is very important, and activities

and accomplishments of chapters and individual members should be carefully written and given to newspapers and magazines for publication. In most cases, editors are anxious to get such articles. More thought and consideration can be given to this need in the vacation months, and there are more opportunities for taking pictures to accompany news articles.

Some states have a two-weeks pre-school planning period before classes start with group meetings for the different areas of education. These give the agriculture teachers a wonderful opportunity to meet together, discuss common problems and plan together an effective program for the coming school year. This period also gives opportunity for state department personnel to meet with the teachers to assist in the planning.

The most effective use of the summertime can only be accomplished when there is careful and worth-while planning. □

Making Hay While - - -

(Continued from page 245)

farmers to observe. Here the newest ideas in field crop production for a locality similar to ours are shown.

Public Relations and Community Service

The public relations items included are radio programs, TV programs, conferences with principal and superintendent, and news articles. The amount of these depends on the opportunities and the time available. We have at least two radio programs in the Wayne County Agricultural Workers Council series each summer.

Another item generally included is to help in making some physical improvement at the school. Often a job is found that would cost more than the school can afford. When we can do it at a savings for them, we try to do it. This helps us when we ask for more equipment for the shop or the department.

Our department tries to be identified with the various agencies and people working with farmers and co-operates in their activities.

As unexpected opportunities become available we try to use them. Often special tours are arranged after our plan is made and we try to work them in and make use of them. We are always alert to activities or special events which will help us to do a better job of teaching vocational agriculture. □

Plan or Drift - - -

(Continued from page 243)

activities (work of the teacher) into a functional calendar for the weeks and months of the summer. It could well develop that some of the things we do are not included. Or, some activities really should receive considerably less time with other work receiving much more time.

It has been my observation that teachers respond to leadership. It is characteristic of us to solve our problems when we really face up to them and apply our thoughts and energies. The combined efforts of those concerned should develop a practical and workable program. It may be a little less than some of us desire, but such a program should meet the educational needs of pupils, young and adult farmers enrolled in vocational agriculture. A little more leadership on the part of all concerned, and particularly teachers with well-balanced programs, should make for improvement in programs of vocational agriculture in the summer. □

Summer Adult - - -

(Continued from page 244)

class sessions that are held in the early evening, outdoors, on the farm of an enrollee. These are often called "twilight" meetings. The class session is scheduled to begin approximately one hour before dark. The daylight period is usually used for the observation of a farm practice on the farm where the class is meeting. The practice should be directly related to the problem being considered at the meeting. As soon as it gets dark, the class group assembles on the lawn for a continuation of the discussion started during the demonstration and visual period before dark. The class usually adjourns fairly early because farmers usually start work at an early hour in the morning during the summer months.

All-day class sessions for tours and demonstrations are also possible during the summer. The teacher of vocational agriculture is available and the interest of farmers in such class meetings is surprisingly high. In fact, the Extension Service has recognized for some time the interest farmers have in tours and field demonstrations during the summer.

Promoting and Scheduling

Summer class sessions have to be promoted. If the farmers in a com-

(Continued on page 251)

"What do studies show?"

About the Preparation of Teachers of Agriculture

HENRY S. BRUNNER, Teacher-Education, The Pennsylvania State University

There can be very little question that the essential problem of all teacher-education remains the same. It is the problem of preparing selected individuals to serve specific groups of people by guiding the activities of these people so as to change their thinking and their behavior in directions which will improve their way of life. Teacher-education in agriculture, like teacher-education in any other field, must concern itself with the characteristics, the quality, and the suitability of the individuals selected for preparation; with the specific skills and knowledges these individuals must have to meet the needs of the particular people they are to serve; with the techniques and procedures likely to be effective in changing behavior; and with a sympathetic understanding of the emotional, ethical and spiritual forces which control and represent values in the lives of human beings, thereby changing the way of life in a society.

Research can and has been bringing light to ways of improving the means by which this essential problem can be met most effectively. A summary of the studies related to teacher-education conducted during the past five years by workers in agricultural education can, therefore, be quite properly presented in categories as they pertain to the stated responsibilities.

Editor's Note: This is one of a series of articles sponsored by the A.V.A. Agr. Ed. Research Committee to review research findings and point up possible applications to our programs.

Summer Adult - - -

(Continued from page 250)

munity are not accustomed to summer class meetings, they often oppose such meetings. Most persons are consciously or unconsciously opposed to change. Also farmers are often opposed to summer class meetings because they are afraid that they will be too busy to attend. The farmers in communities where summer class meetings have been tried, however, have found that there are periods during the summer when they do have time to attend class meetings. Perhaps modern techniques of farming and modern machinery have given farmers relatively free periods during the summer which they did not have in the past.

Farmers must feel a need for a

About Personnel Considerations

Recent findings in Tennessee, Vermont and Ohio (1, 53, 99) support a number of previous studies, with both trainees and teachers in service reporting their desire to work with farm boys, and the prospect of working in agriculture in a large variety of ways, as the strongest influences in their choosing agricultural education as a major. Persons most influential in their choice were the teachers of vocational agriculture, personal friends working in agriculture, and the teacher-trainers in agricultural education. Generally more than 50% of those studied made this choice while in high school. The lesser proportion waited until they were in college. About three-fourths of those studied in Ohio had at least 3 years of vocational agriculture in high school; 78% of these had held office in FFA, while 23% had received State Farmer degrees. Three-fourths of the whole group had also been enrolled in 4-H Club work. 40% of them for 5 years or more. Sixty-two percent were doing part-time work and nearly 50% were earning half or more of their college expenses. Sledge in Michigan (78) and Peck in another Tennessee study (64) joined these other investigators in recommending attention to collection and use of orientation materials and procedures at both the high school and college levels. Suggestions included: exploratory courses, counselling and guidance services, personal interviews, work experience in organized groups, and instruments to measure social

and/or professional competencies.

Quite a number of investigators have been interested in the influences bearing on tenure. Studies in the four regions of the United States (8, 22, 25, 30, 46, 62, 74) indicate that in general a large majority, 65-75%, of all graduates from agricultural education find their first placement in teaching. There is some indication that this percentage would be even higher if teaching positions could be available earlier, i.e., at time of graduation. The consensus also shows, however, that about 30% of tenures are for one year only, and another 25% end after two years. The most important factors causing these high casualties were low salaries and limited opportunity for advancement. In one study, more than three-fourths of the drop-outs were rated better than average by their supervisors. The average overall length of tenure reported ranged from 1.83 years to 3.8 years. About one-third of the men entering the teaching field remain for 10 years or more. Evans, reporting for New Jersey, showed 9.25% in present position 30 years or more; another 10.12%, 20 years or more; and another 12.96%, 10 years or more. Studying why men remain or leave teaching, Wolf, Ohio, (97) found that marrying before or immediately after graduation tended to keep teachers of vocational agriculture in the profession. In a Maryland study (83), 72.8% of the respondents intended to remain in teaching. They liked more "activities" by far than they disliked. Out-of-school class work was cited as a holding influence by 82% of the group, and the same proportion cited community organizational work (average of 2.6 organizations) as an attraction. Hall (30) reported that seven of every ten withdrawals in the group he studied (1095 cases) were permanent, but two of these seven became identified with some other phase of education, "in

(Continued on page 252)

class meeting of a definite type before they are willing, at first, to schedule it in the summer. How can farmers be helped to recognize the need for certain types of class meetings which can only be held successfully in the summer? One way is the planning of the summer class meetings at opportune times during previous class meetings. For example, if a class is studying the use of fertilizers and one of the enrollees decides to adopt a certain fertilizer practice, this is the opportune time to plan a summer class meeting. The farmer could be asked immediately whether the rest of the class could be invited to observe the results he obtains in using the practice. If he says yes, which he probably will, further plans can be made immediately for a class session on his farm. A tentative period

of time can be established for the class session. If a teacher is alert for such opportunities for summer class sessions, he will often discover that the number of possibilities for summer meetings exceeds the number that can be scheduled.

A committee composed of the farmer involved, the teacher and others, if needed, can be given the responsibility of setting the exact day and time of the meeting. This procedure provides flexibility. The committee can determine the opportune time to schedule a meeting after considering the work load of the farmers and other factors related to the success of the class. This procedure makes it unnecessary to set the exact time of a summer meeting until only a few days in advance of the meeting. □

About the Preparation - - -

(Continued from page 251)

positions of greater prestige and responsibility."

With respect to job opportunities other than teaching, another group of interesting investigations (18, 33, 45, 59, 68, 98) presented findings indicating that graduates from agricultural education are in demand in a wide variety of occupations. In one single Florida group, 29 different occupations were reported by graduates. It would appear that generally about 10% of agricultural education graduates may be found teaching subjects other than agriculture, about 10% in educational administration, 3 to 5% in businesses closely related to agriculture and 12 to 15% in businesses unrelated to agriculture. Interestingly enough, practically all respondents stated that the training they received in agricultural education had been markedly helpful to them in their "outside" occupations, and those who had some teaching experience thought so much of that experience that they would advise young men with farm backgrounds to enter the profession. The Virginia study (59) concluded that teaching vocational agriculture is no longer an economic dead-end but offers opportunities that compare favorably with all other occupations.

The number of studies in the area of in-service teacher education (3, 11, 23, 34, 37, 48, 70, 89, 90, 93, 94, 100) indicate that this is coming to be recognized as an important part of the whole program. A number of the investigators, particularly Cardozer in Louisiana and Hutson in Arkansas, conclude that more attention should be given to supervision and assistance to beginning teachers. They need help in planning programs for their own situations. In an Oklahoma group, 60% of the teachers had taken a professional course within 2 years after starting to teach; and in Missouri in a group of 273 teachers with an average of 9.6 years experience, 74 had Master's degrees and 156 more had some graduate work. In a number of groups it was found that teachers with Master's degrees were devoting significantly more time to work with young and adult farmers. The findings indicate generally that graduate schools need to review their offerings to assure that appropriate courses are made available to teachers. Presently it is often impossible for teachers in service to arrange graduate study which is adjusted to their schedules, to their need for breadth rather than specialization, or to their stage of development in a subject-matter area.

About Curriculum Content

Studies of curriculum content usually proceed from the point of needs to be met. Recent studies in agricultural education, therefore, all refer to the general trends affecting agriculture: decrease in

farm population while the total population is increasing, growing urbanization, more part-time farmers, fewer but larger farms with necessarily larger capitalization, and the so-called "explosion" in agricultural technology and mechanization. Stafford (81) more or less presents the pattern of findings when he recommends more emphasis on farm mechanics, agricultural economics and agronomy.

Among the investigations into the problems and needs of beginning teachers (6, 15, 36, 67, 73, 75), Missouri and Georgia data resulted in conclusions that beginning teachers are handicapped on account of lack of ability in manipulative skills while several other groups indicated greatest need for the professional abilities of organizing programs and maintaining interest. The fact that beginning teachers found "problems" in matters which were "discussed" thoroughly in their undergraduate training but which had little meaning until they were on the job was an interesting discovery in the Illinois situation.

The researches specific to training in farm mechanics (20, 26, 31, 38, 54, 57, 61) for the most part show needs in terms of enumerated skills and abilities in designated areas. The Iowa study, for instance, reported on 204 skills in 17 farm mechanics areas. In summary, the data were interpreted to call for much greater emphasis in practically all areas in college courses, but here again the teachers' deficiencies seemed more evident in the managerial skills such as selection of machines and planning of buildings rather than in the more common manual skills of construction and repair.

The need for training in the use of visual and other sensory aids also received attention (27, 49, 60, 63, 65, 88). One report showed that only 20 out of 176 teachers ever had a college course in visual aids. Teachers and extension workers alike agreed in convincing majorities that they must be prepared to use pictorial materials, charts, projection equipment, magnetic recordings, radio, television, exhibits, demonstrations and field tours, and that they must have an understanding of the psychology of comprehension as it applies to these things. Foote also concluded that this knowledge tends to enable teachers to secure necessary equipment with less difficulty. One Michigan study on the use of television points out that the producer (teacher or county agent) must assume the role of the educational authority, and must have sufficient training in the medium to deserve the respect and confidence of those with whom he works.

In the cases where data were gathered to distinguish the proportions of course work required in different areas (13, 50, 72), the consensus indicated: 45-50% of total requirements in agriculture, about 20% in natural sciences, about 20% in social science and communication, and

about 16% in professional education. In the latter bracket, the arrangements for participating experience appear to govern the amount of time and credit required in other course work. Loreen's nation-wide study showed a range of 2 to 48 weeks for participating experience with 3 to 18 semester hours of credit allowed. Consequently, the requirements and credit for campus courses varied inversely.

Pointing up similar proportions of needs and offerings at the in-service level, a group of studies (39, 40, 55, 67, 82, 86, 91) found in district meetings, conferences, and graduate course work an almost equal division of emphasis among professional education, technical improvement and social or general education activities. Taylor recommended specifically a summer-sessions graduate course dealing with problems of beginning teachers. Montgomery in Alabama noted a need for increased allowance of transfer credit between graduate schools, more exchange of staff members, and greater use of visiting professors.

About Methodological Considerations— Ways and Means

By far the greatest amount of research devoted to any particular phase of the program was designed to investigate the nature and effectiveness of different arrangements for participating experiences in teaching (10, 13, 28, 32, 35, 42, 43, 44, 47, 52, 71, 76, 84, 85, 92). In general, with the length of period ranging from 2 weeks to 48 weeks (average 9.34 weeks), the findings indicate a direct relationship between amount of participating experience and quality of performance in teaching, especially when only first year performance is considered. Most student-teaching centers provide comparatively adequate experience in the areas of getting established, teaching all-day groups and caring for physical facilities. Least experience was gained in the areas of young and adult farmer instruction, and in evaluating the effectiveness of programs. In a Southern Region study, Horne found 68.5% of the student-teaching centers deficient in the experiences provided.

While several investigators concluded that the quality of teaching performance tended to follow the pattern of the extent to which training had been obtained, the studies attempting to show statistical relationships between specific items of practice experience and teaching performance did not support this thesis. Canada found only a few correlation coefficient values great enough to indicate significant relationship.

Data expressed in terms of teacher-trainer evaluations and preferences called for a period of 18 weeks, including at least 2 weeks of summer work, in participating experience with the students living in the training center community.

(Continued on page 253)

About the Preparation - - -

(Continued from page 252)

Some would divide this period, a part in the Junior year, and a part in the Senior year; and some would specify that the opening of school in the fall should be included. Kennedy, in Michigan, found a marked difference in the participating experiences gained by commuting students as compared with students living in the school community.

Considering the administration of the program, Tom, with nation-wide data, reported that about 1/3 of the institutions paid student teachers either in a stipend-salary or as reimbursement for expenses (range, \$10 to \$2,000), while 2/3 of the 70 institutions studied paid supervising teachers in amounts ranging from \$25 to \$467 per year. Conclusions in Minnesota and Michigan studies (79, 95) designed to evaluate different techniques of meeting the needs of teachers in service stated that while world events, social, economic, and political conditions inevitably have an influence on the development of all phases of agricultural education, the actual changes in course offerings and procedures that have occurred from time to time resulted from local demands and the individual abilities or needs of the teachers. Another group of investigations (14, 16, 17, 21, 58) summarized the teachers' preferences for in-service procedures as, in order: workshops, informational services, consultative services, and graduate courses. Deyoe found all 13 states in the North Central Region providing some informational service, and there is a definite trend throughout the country to have teacher education staff members as subject matter specialists to give full time to in-service work. The New York study reports some attention to agricultural tape and disc recording as well as kinescopes. Teachers also indicated (56, 96) that their own participation, with responsibility for planning and action, in workshops and conferences under the direction of "out-of-state" leaders, as well as the activities and experience involved in local problem research as a part of graduate study, are conducive to effective professional improvement. Wilson concluded that research on its own merits, as an indispensable tool for teachers, should be tied in with most graduate courses and should not be considered as one separate required piece of work. Reflecting the recognized trend toward broad responsibilities in the role of all teachers, a considerable number of research problems were designed to gather data about the extra-class and/or general education activities of teachers of agriculture. Summaries of the data in one group of studies (12, 51, 66, 77) show that just about half the time of agricultural teacher is devoted to activities other than teaching agriculture (average 28 hours out of 57.4 hours average week). Clancy found that with respect to guidance responsibilities, school

administrators desired the teacher of vocational agriculture to be most proficient in social and personal guidance rather than in vocational or educational guidance. Interesting findings in the area of general education (2, 4, 5, 7, 9, 101) are exemplified by such statements as: "Seventy-eight percent thought a knowledge of parliamentary procedure makes a contribution to success in farming," and, "it was found that in general . . . as an individual progresses in agricultural education he develops gradually from autism, to absolutism, and then to reciprocity." All data comparing teachers of agriculture with teachers in other fields with respect to fitness for teaching acclaim teachers of agriculture as superior in technical subject-matter competence but lacking in general education, particularly in the area of communications and understanding of our culture, both social and economic. It would seem propitious, therefore, for everyone concerned with teacher education, without in any way lessening attention to technical preparation, to bend further efforts toward preparing students for the "whole teaching situation," for their responsibilities to society as a whole. For this more than just courses about grammar, exposition, speech, psychology and philosophy will be necessary. Students must understand and translate principles into action—to write, to speak, to psychologize and to philosophize effectively in their own lives, and to make these things a part of themselves in every day living.

Studies Cited

Note: The number in parenthesis following each citation is the number given the study in the U.S. Office of Education "Summaries of Studies in Agricultural Education" Series, Bulletins 251, 253, 256, 263, 265 and 272.

1. Anderson, Ernest Francis. A Study of the Agricultural Education Majors Who Graduated from the University of Tennessee College of Agriculture from the Fall Quarter, 1949, Through the Spring Quarter, 1955. Thesis, M.S., 1956, University of Tennessee. (2274)
2. Badran, Mostafa Kamel. A Comparison of Conceptions of the Role of the Teacher of Vocational Agriculture. Thesis, Ph.D., 1954, University of Illinois. (2078)
3. Bailey, Leo Lynn. A Suggested Graduate Program Leading to the Master's Degree in Agricultural Education. Dissertation, Ph.D., 1954, Louisiana State University. (2079)
4. Bailey, Zeno Earl. Evaluation of Selected Aspects of the Pre-Service Curriculum in Agricultural Education at the Alabama Polytechnic Institute. Ph.D., Dissertation, 1955, Ohio State University. (2281)
5. Basinger, Lorain Alden. Superintendents' Evaluation of Teachers of Vocational Agriculture in Ohio. Thesis, B.S., 1954, Ohio State University. (2081)
6. Beamer, Rufus W. Reconstruction of the Undergraduate Professional Courses in Agricultural Education at the University of Tennessee, Thesis, Ed.D., 1956, University of Illinois. (2283)
7. Bender, Ralph E. and Hoefflin, Ruth. Problems and Concerns of Freshmen in the College of Agriculture at the Ohio State University. Nonthesis, 1955, Ohio State University. (2084)
8. Bryan, James Eugene. A Survey of the Bachelor of Science Graduates in Agricultural Education at the University of Idaho from 1934 to 1954, Inclusive. Thesis, M.S., 1956, University of Idaho. (2297)
9. Buck, William P. The Attitudes and Opinions of Vocational Agriculture Teachers and Students Toward the Study of Parliamentary Procedure. Nonthesis study, 1954, Oklahoma A. & M. College. (2098)
10. Canada, Ralph Wesley. The Relationship in Participating Experiences in Student Teaching to Comparable Experience in Teaching Vocational Agriculture. Thesis, D.Ed., 1954, Pennsylvania State University. (1884)
11. Cardozier, Virgus Ray. In-Service Education of Teachers of Vocational Agriculture in Louisiana. Thesis, Ph.D., 1952, The Ohio State University. (1486)
12. Clancy, John William. An Exploratory Study Determining the Importance and the Effectiveness of the Teacher of Vocational Agriculture in Guidance. Master's Problem, 1955, University of Wisconsin. (2106)
13. Coombs, Joseph Glenn. An Analysis of the Relationship Between Directed Experiences Obtained in Training and First Year Teaching Performance for Teachers of Vocational Agriculture and an Examination of the Procedure Used. Thesis, Ph.D., 1951, Cornell University. (1501)
14. Davis, Richard Cowan. A Proposal For Strengthening the Program of Agricultural Education in the Agricultural, Mechanical and Normal College of Arkansas. Thesis, Ph.D., 1956, Michigan State University. (2487)
15. Deboer, Wendell J. Problem areas of Beginning Teachers of Vocational Agriculture in South Dakota. Research Problem, M.S., 1954, South Dakota State College. (2319)
16. Deems, Howard W. An Evaluation of the In-Service Program Provided by the University of Nebraska for Teachers of Vocational Agriculture. Thesis, Ed.D., 1956, University of Missouri. (2321)

(Continued on page 255)

Can you answer this question? - - -

How Far Shall We Go in Farm Mechanics?

ROBERT E. BENNETT, Vo-Ag Instructor, Litchfield, Conn.



Robert E. Bennett

THE old question of how far shall we go beyond maintenance and simple repairs in our shops is still being argued in farm mechanics education. The problem of what skills and understandings should be taught can be likened to the problems of adjustment and readjustment in general education throughout the country. Everyone agrees we are in the throws of rapid changes, but there is lack of agreement on what should be taught.

I can delve into a lot of educational jargon on the subject, which I know you won't read, or I can skim the surface with a few examples pointing up a need for change. The "old guard," I suspect, should stop right here. For, in any case, we will go only so far as our interest, training and experience will take us. Let's face it! The cause for all of this change and confusion is mechanical in nature and there is no one who realizes it any more than the alert vo-ag teacher. Our farm mechanics program is swimming in a whirlpool of technology the like of which challenges the best of us to keep abreast.

There is, for example, a greater need than ever before to make intelligent decisions. The farmer represents one of the largest purchasers in the country, but what are we doing in our shop programs to teach such things as quality materials, comparative buying and the financing of such goods? One of the major problems with young farmers is to accumulate adequate machinery and equipment at a price he can afford.

We would all like to buy new machinery. I can recall seeing two trucks of the same model standing side by side; one with a good engine and broken down chassis, the other with a good chassis. Both of these trucks were being sold at junk prices. If I were a young farmer I wouldn't mind earning between two and three hundred dollars in one day making this switch-over. What does this suggest?

It suggests that the young farmer must be able to evaluate both engines and truck conditions in terms of tools and time to do the job. It is possible, for example, to pick up a \$100.00 tractor, put in \$100.00 worth of parts, use the tractor for one year, clean it and paint it, and get \$200.00 toward a turn-in on another tractor. In other words, it is possible to double one's investment with a little labor and tools during slow farming periods. One of the discouraging features of farming today is the high cost of machinery and equipment.

The question of how far should we go in farm mechanics is directly related to the amount of time one has available on the farm to perform the tasks and services he cannot afford to hire. You don't have to be an electrician to install simple lighting circuits where local codes permit. You do not have to be a plumber to install copper and plastic tubing in most pump installations. These are relatively simple skills that the unions would like to see us stay away from but which the farmer cannot afford to hire done.

If we assume a responsibility of education for the future as well as the present something must be added to our farm shop programs. As I skip through the farm shop manual such skills as leather work, rope work, plumbing with galvanized pipe, riveting and some of the forging skills should be re-examined in the light of what is being done on the farm and what is likely to be done on the farms of the future. Recently, I saw a demonstration on how to braid rope. This skill is economically unsound with rope as cheap as it is and labor so costly. One might better learn how a jet pump works so he can repair it if necessary.

The advances made in hand-power tools relegates the hand saw, two-man saw and the axe almost to the level of the scythe. Boys are using power tools on the farm. Not to recognize this in one's shop program is pure folly. Time spent on teaching the hand saw (sharpening, fitting, setting, etc.) is open to serious question. The new reciprocating or sabre saw as it is sometimes called (cost around \$19.00) can substitute for the key-

hole saw, the hack saw in some cases and a band saw. It will cut aluminum and galvanized sheathing as well as three-quarter inch plywood and masonite. It is a sure bet that all farmers will have one in the next few years because of its versatility. Have you got one in your farm shop?

What are we doing in the teaching of construction and construction materials? Steel, aluminum, and a host of non-wood products are substituting for wood on the farm. Concrete, cinder blocks, and glass bricks are common farm materials today. I would guess that if an economical substitute can be found for the structural use of the two by four and other heavy timbers, most of the wood on the farms of the future may be relegated to the fire place in-so-far as farm structures are concerned.

I would ask myself these questions: What am I doing about such things as hydraulics, drainage, bulk and automatic feeding, gutter cleaners, bulk milk tanks and balers. We would all agree there is much we hope to teach in our farm shops, but we would disagree on what is to be taught and where. The Industrial Arts Department does a grand job with wood-working skills. We should recognize this and make it a requirement for all freshmen who can schedule the course. There are many farm skills we should be concentrating on other than pilot holes, square cuts, tool identification, and minor maintenance of small tools.

I am far from an expert in the field of farm mechanics. My special weaknesses I keep to myself, but I know that the things I emphasize in my program are the things I know best. It is natural human behavior to resist change because it means extra output. In this sense I am part of the "old guard" in refusing to accept changes too rapidly. But all of us are caught in the rapidly moving conditions of our time. Round and round we know we will go and where we'll stop nobody knows. The next thing we know we will be involved with atomic tractors. Such a transition will be most difficult if we fail to accept the small changes in between.

How far shall we go? Let your farm visitations be your conscience. Take a look at what *good* farmers are doing. Check with them to find out what they had to know to get where they are. Add to this the opportunities in related fields, and then pace your program 10 years ahead of the best farm in the community. □

About the Preparation - - -

(Continued from page 253)

17. Deyoe, George P. A Study of In-Service Education Provided for Teachers of Vocational Agriculture by Departments of Agricultural Education in the Central Region. Nonthesis, 1955. (2324)
18. Douglas, Dan Otto. A Study of the Agricultural Graduates of East Texas State Teachers College. Thesis, M.S., 1954, East Texas State Teachers College. (2123)
19. Dowdy, Elmer R. A Program for Student Teaching of Vocational Agriculture in the Hillsboro High School. Research Problem, M.Ag.-Ed., 1953, North Carolina State College. (1908)
20. Dugger, Roy Wesley. Mechanical Competencies Needed by Vocational Agriculture Teachers in Oklahoma. Thesis, Ed.D., 1956, Oklahoma Agricultural and Mechanical College. (2326)
21. Dunn, James Elton. Developing a Procedure for Determining Teaching Materials That Should Be Supplied by the Department of Agricultural Education, University of Georgia, on a Statewide Basis. Problem, M.Ed., 1952, University of Georgia. (1727)
22. Edwards, Robert Lee. Why Graduates in Agricultural Education Do Not Teach Vocational Agriculture. Thesis M.S., 1953, North Carolina State College. (1913)
23. Ekstrom, George F. Professional Training, Tenure and Salaries of Missouri Teachers of Vocational Agriculture 1955-56. Nonthesis study, 1956, University of Missouri. (2332)
24. Essman, Rolland L. A Study of the Summer Activities of Nebraska Teachers of Vocational Agriculture. Thesis, M.S., 1956, The University of Nebraska. (2499)
25. Evans, William H. A Survey of the Tenure and Probable Retirement of Teachers of Vocational Agriculture in New Jersey. Nonthesis study, 1953, Rutgers University. (1916)
26. Farabee, Elbin J. An In-Service Teachers' Rating of the Farm Mechanics Training Received at The Pennsylvania State University. Paper, M.Ed., 1956, Pennsylvania State University. (2337)
27. Foote, W. Duane. Factors Affecting the Use of Selected Teaching Aids by Teachers of Vocational Agriculture in Nebraska. Thesis, M.S., 1956, The University of Nebraska. (2502)
28. Frymyer, Arlis E. An Evaluation of Supervised Student-Teaching Experiences That Were Used By Teachers of Vocational Agriculture. Thesis, M.S., 1956, Virginia Polytechnic Institute. (2343)
29. Gee, John R., Jr. Technical Skills in Soils and Field Crop Enterprises Requiring a Planned Demonstration for Effective Teaching, Needed by Beginning Teachers of Vocational Agriculture in the North Atlantic Region. Thesis, M.S., 1956, University of Maryland. (2348)
30. Hall, William F. Teachers of Vocational Agriculture in Pennsylvania; Their Training, Tenure and Other Characteristics. Progress Report No. 138, Pennsylvania State University, 1955. (2145)
31. Hamilton, James Roland. The Preparation of Michigan Teachers of Vocational Agriculture in Two Areas of Farm Mechanics. Thesis, Ed.D., 1955, Michigan State University. (2355)
32. Hardway, Wendell G. Participating Experiences Obtained in Training and Subsequent Performance in Teaching for Teachers of Vocational Agriculture. Problem, M.S., 1952, West Virginia University. (1547)
33. Harper, James M. A Follow-Up Study of the Occupations of Graduates of the Department of Agricultural Education, University of Georgia, From the School Year 1945-46 to the School Year 1949-50, Inclusive. Problem, M.Ed., 1952, University of Georgia. (1743)
34. Hodges, Jeddie Ray. The Techniques Used by the High-School Principal in Supervising the Instruction in Vocational Agriculture. Thesis, M.S., 1953, Louisiana State University. (1750)
35. Horne, Thomas J. The Development of an Instrument for Evaluation of Participating Experience in Teaching Vocational Agriculture in the Southern Region of the United States. Thesis, Ph.D., 1954, Pennsylvania State University. (1943)
36. Hutson, Denver B., and Ekstrom, G. F. A Study of the Training Needs for Prospective Teachers of Vocational Agriculture. Nonthesis Study, University of Missouri, 1952. (1559)
37. Hutson, Denver B. A Study of the Professional Problems Encountered by Beginning Teachers of Vocational Agriculture in Arkansas. Thesis, Ed.D., 1953, University of Missouri. (1756)
38. Jacobs, Clinton Otto. Determining the Need for a Program of Instruction in Farm Mechanics for College Students Based Upon a Survey of Farm-Operator Performance. Report, M.S., 1953, Kansas State College. (1757)
39. Jeffries, Jones Everette. In-Service Education of Negro Teachers of Vocational Agriculture in North Carolina. Thesis, Ed.D., 1953, The Pennsylvania State College. (1759)
40. Juan, Virginio Castilio. The Educational Attainment, Service Status, and In-Service Training Needs of Agricultural Teachers in the Philippines. Thesis, M.S., 1955, Pennsylvania State University. (2163)
41. Juliano, Jorge P. The Technical Training of Teachers of Vocational Agriculture in the Philippines. Thesis, M.S., 1954, Pennsylvania State University. (1959)
42. Kantner, Earl Franklin. An Appraisal of Professional Experiences of Student and Apprentice Teachers in Agricultural Education. Thesis, M.Sc., 1956, The Ohio State University. (2537)
43. Kennedy, Luke D. Activities of Practice Teachers in Vocational Agriculture. Research Project, M.A., 1952, Sam Houston State Teachers College. (1766)
44. Kennedy, William Henry. A Comparison of the Participatory Experiences of Resident and Commuting Student Teachers in Agriculture at Michigan State College in 1952. Thesis, M.A., 1953, Michigan State College. (1767)
45. Keown, Robert A. A Survey of Opinions and Attitudes of Fifty-five Former Agricultural Education Students Who Are Not Teaching Agriculture at the Present Time. Report, M.Ed., 1957, Agricultural and Mechanical College of Texas. (2539)
46. Killough, Frank Boatwright. A Study of the Drop-Outs of White Vocational Agriculture Teachers of Alabama for the Period of July 1, 1950, to June 30, 1955. Nonthesis study, M.S., 1955, Alabama Polytechnic Institute. (2372)
47. Lechner, Fred George. Participating Experiences of Student Teachers in Vocational Agriculture. Master's Report, M.Ed., 1951, Colorado Agricultural and Mechanical College. (1578)
48. Little, Maurice. Value of the Master's Degree in the Field of Agricultural Education. Master's Report, M.Ed., 1952, Colorado Agricultural and Mechanical College. (1580)
49. Lofgren, Charles Edward. The Program for Audio-Visual Instruction at the West Central School of Agriculture, Morris, Minnesota. Colloquium, M.S., 1957, University of Minnesota. (2550)
50. Loreen, C. Oscar. A Study of the Agricultural Education Curricula of Forty-nine Teacher-Training Centers in the United States and Puerto Rico. Special study, 1953. Agricultural Education Bulletin 6, State College of Washington. (1776)
51. Loreen, C. Oscar. Time Devoted to Professional Duties by Teachers of Vocational Agriculture in the

(Continued on page 257)

Relation between High School Vocational Agriculture Training and Status of Graduates in Nonfarm Occupations Related to Farming*

DON N. CHRISTENSEN, Graduate Student, Iowa State College



Don N. Christensen

SINCE the number of persons engaged in farming has declined rapidly in recent years, and since this decline has been accompanied by an increase in the number of those engaged in nonfarm occupations which provide agricultural goods and services, the latter have become as important a part of agriculture as farming itself. The author, in cooperation with Iowa State College and the Iowa Agricultural Experiment Station, conducted an investigation to determine the establishment of farm-reared male high school graduates in nonfarm occupations related to farming.

Nature of the Study

The primary purpose of this study was to determine the relation between high school vocational agriculture training and the occupational status of the graduates. The relations between occupational status of the graduates and each of the following variables were also made: college training, military service, occupational migration and type of employment.

The criteria used for measurement of occupational status were expressed occupational satisfaction, occupational prestige and occupational income.

Forty-five high schools which had offered vocational agriculture during 11 of the 12 years from 1943 to 1954 were paired with 45 schools which had not offered vocational agriculture during this period. The school pairings, all located in north central and east central Iowa, were based on town population, school enrollment, location, level of living, soil type, type of farming and other general characteristics. Twenty pairs of schools were randomly selected from the 45 pairs to make up the sample of

40 schools used in this study.

A questionnaire was mailed to all graduates except those who were known to be currently farming or in the military service. Upon the return of each questionnaire, each graduate was classified as being in an occupation (1) directly related to farming, (2) related to agriculture but not directly related to farming, or (3) not related to agriculture. Graduates whose knowledge of farming was of significant value to them in the fulfillment of their duties were classified as being in an occupation directly related to farming.

Of the 925 usable questionnaires returned, 201 graduates were classified as being in a farm related occupation. This number was randomly reduced until a sample of 80 vocational agriculture graduates and 80 nonvocational agriculture graduates was obtained.

Findings

When the home characteristics of the graduates at the time of graduation from the two types of schools were compared, no significant differences were found on the items tested. These items included (a) total acres in home farms, (b) parental land ownership, (c) age of fathers, (d) number of fathers living, (e) education of fathers, (f) education of mothers and (g) number of brothers.

A like number of graduates, 61, from each type of school had marital status in 1958.

When the vocational agriculture graduates were compared to the nonvocational agriculture graduates, non-significant relations were observed in respect to the following occupational characteristics: (a) the number of months in their occupations at the time of the investigation, (b) number of occupations held since high school graduation, (c) the estimated value of the knowledge of farming to their present occupations and (d) the number of workers supervised by the graduate.

When each of the following variables—total college training, military

veteran status, occupational migration and type of employment—was compared with the two types of training, no significant differences were observed. When the interrelations of these variables were compared, two significant differences were noted. More of the college graduates tended to migrate and be salaried than would be expected.

The relations between college training and the criteria for measuring status—occupational income, prestige and expression of satisfaction—were all significant at the 1 percent level in favor of the college graduates.

It was found that the occupational income and prestige of the veterans were significantly higher at the 5 percent level when compared to those of the nonveterans. There were no differences between the veterans and nonveterans in expressed occupational satisfaction.

When the graduates who had migrated were compared to those who had not migrated, it was found that the migrants had a higher occupational status. The income and prestige of the migrants was significantly higher at the 1 percent level whereas the degree of expressed occupational satisfaction was higher at the 5 percent level.

It was found that the occupational income of the graduates who were self-employed was significantly higher at the 5 percent level when compared to the graduates who were salaried. There were no differences between those who were self-employed and those who were salaried in respect to prestige and satisfaction.

Coefficients of correlation were computed for the three criteria for determining occupational status. The findings were income and prestige, +.347; income and satisfaction, +.238; and prestige and satisfaction, +.261. These values were all significant at the 1 percent level.

Little difference existed between the vocational agricultural graduates and the nonvocational agriculture

*Don N. Christensen. Relation between High School Vocational Agriculture Training and Status of Graduates in Nonfarm Occupations Related to Farming. Unpublished M. S. Thesis, Iowa State College Library, Ames, Iowa, 1958.

About the Preparation - - -

(Continued from page 255)

- State of Washington. Nonthesis study, 1955, State College of Washington. (2551)
52. Luster, George Lowell. Pre-Service Curricula for Preparing Teachers of Vocational Agriculture in the North Central Region. Thesis, Ph.D., 1954, Ohio State University. (2174)
 53. MacDonald, Leland H. Why Students Choose the Agricultural Education Major. Nonthesis study, 1953, University of Vermont and State Agricultural College. (1978)
 54. Miller, Harry T. Technical Skills in Farm Mechanics Requiring a Planned Demonstration for Effective Teaching, Needed by Beginning Teachers of Vocational Agriculture in the North Atlantic Region. Thesis, M.S., 1952, University of Maryland. (1602)
 55. Montgomery, Robert W. Professional Needs of Teachers of Vocational Agriculture in Alabama and Their Implications for In-Service Education. Thesis, Ph.D., 1952, The Ohio State University. (1789)
 56. Myers, Roller Tipton. The Value and Effectiveness of the Vocational Agriculture Teachers Conference for Selected Teachers in the Southwest Virginia Area. Thesis, M.S., 1953, Virginia Polytechnic Institute. (1796)
 57. Nielsen, Duane M. Pre-Service Farm Mechanics Training Received by Selected Vocational Agriculture Instructors. Thesis, M.S., 1955, University of Nebraska. (2398)
 58. Noakes, Harold L., Coffin, Robert F., and Others. Discovering the Subject-Matter Services Needed by Teachers of Vocational Agriculture. Nonthesis study, 1953, North Atlantic Region Subcommittee on Instructional Materials and Methods. (1800)
 59. Nolen, H. P., Horne, T.J., and Sanders, H. W. The Financial Status of Vocational Agriculture Teachers in Virginia. Staff study, 1954, Virginia Polytechnic Institute. (2194)
 60. Norford, Charles Albert. The Pre-Service and In-Service Education of County Agricultural Extension Workers in Audio-Visual Materials and Methods of Instruction. Thesis, Ed.D., 1956, Pennsylvania State University. (2399)
 61. Northrop, Floyd L. Professional Needs of Florida Teachers of Vocational Agriculture. Thesis, M.S.A., 1956, University of Florida. (2576)
 62. Ogelsby, John M. Factors Affecting Length of Tenure of Vocational Agriculture Teachers Who Are Recent Graduates of Utah State Agricultural College. Thesis, M.Ed., 1954, Utah State Agricultural College. (2196)
 63. Oliphant, Marcut Wilburn. A Survey Study of Audio-Visual Equipment and Use in Kansas Vocational Agriculture Departments. Master's Report, M.S., 1957, Kansas State College. (2577)
 64. Peck, J. Boyd. A Functional Guidance Program for Agricultural Education Students at the University of Tennessee. Problem, M.S., 1951, University of Tennessee. (1623)
 65. Preisel, Clayton Edward. The Use of Television in Teaching Vocational Agriculture in the Carson City Vocational Program. Problem, M.A., 1957, Michigan State University. (2584)
 66. Quimby, Milford E. Activities of Vocational Agriculture Teachers in Twenty Eastern Oklahoma High Schools. Nonthesis study, 1954, Oklahoma A. and M. College. (2203)
 67. Ritchie, Austin Everett. An Evaluation of the In-Service Training Program for Beginning Teachers of Vocational Agriculture in Ohio. Thesis, M.S., 1951, The Ohio State University. (1639)
 68. Roderick, Cecil V. Why Former Teachers of Vocational Agriculture Left the Profession. Nonthesis study, 1953, University of Missouri. (2027)
 69. Roberts, Theodore A. A Study of the Technical Abilities Needed by the Teacher of Vocational Agriculture in Helping Farmers and Farm Boys with Their Problems of Swine Production and Marketing. Problem, M.Ed., 1954, University of Georgia. (2213)
 70. Ross, Thomas J. The Professional Training of 346 Teachers of Vocational Agriculture in Oklahoma. Nonthesis study, 1954, Oklahoma A. and M. College. (2215)
 71. Sarb, Gordon Lee. The Training of Prospective Teachers of Vocational Agriculture for Young Farmer Education. Problem, M.S., 1953, University of Wisconsin. (1818)
 72. Scarborough, C. C., Chappelle, Ray, and Orr, D. M. A Survey of the Undergraduate Programs in Agricultural Education in the Southern Region. Nonthesis study, 1953, North Carolina State College. (2029)
 73. Scott, Marshall J., and Phipps, Lloyd. Assistance Needed by First Year Teachers. Nonthesis study, 1951, University of Illinois, Urbana. (1652)
 74. Schrag, Elmer Phillip. The Employment History of Vocational Agricultural Teachers in Kansas. Master's Report, M.S., 1955, Kansas State College. (2219)
 75. Schultz, Elvin Carl. A Study to Determine the Extent to Which Undergraduate Training in Technical Agriculture Has Been Adequate for Teaching Vocational Agriculture. Thesis, M.S., 1953, University of Nebraska. (2033)
 76. Shaffer, J. Lloyd, Jr. A Comparison of Two Groups of Students (in Maryland) Using the North Atlantic Participating Experience Checklist. Nonthesis study, 1952, University of Maryland. (1654)
 77. Simmons, Carl W. School Non-agricultural and Community Activities of Vocational Agricultural Instructors in Nebraska. Thesis, M.S., 1954, University of Nebraska. (2226)
 78. Sledge, George Willard. Relationship Between Some Pre-Teaching Characteristics and Subsequent Performance of Teachers of Vocational Agriculture. Thesis, Ed.D., 1954, Michigan State College. (2036)
 79. Smith, Carl Emilio. An Investigation of the Courses Offered by The Division of Agricultural Education Since Its Creation at the University of Minnesota. Problem, M.S., University of Minnesota. (1659)
 80. Smith, Warren C. Technical Skills in the Livestock Enterprises Requiring a Planned Demonstration for Effective Teaching Needed by Beginning Teachers of Vocational Agriculture in the North Atlantic Region. Thesis, M.S., 1952, University of Maryland. (1600)
 81. Stafford, George H. What Agricultural Knowledge Should Be Emphasized in the Preparation of Teachers of Vocational Agriculture for the East Texas Area? Thesis, Ed.D., 1957, Cornell University. (2609)
 82. Stuckey, Wenrich, Jr. The Present Program and Needs for In-Service Education in Farm Mechanics for Teachers of Vocational Agriculture in Ohio. Nonthesis, 1956, The Ohio State University. (2614)
 83. Sultenfuss, Vernon B. What Teachers of Vocational Agriculture Like About Their Profession. Thesis, M.S., 1956, University of Maryland. (2433)
 84. Swanson, E. Burnell. An Evaluation of the Participating Experiences of Vocational Agriculture Student Teachers in the Off-Campus Teacher-Training Program of the University of Nebraska. Thesis, M.S., 1955, University of Nebraska. (2435)
 85. Tanner, Daniel. An Evaluation of the Undergraduate Program at the Ohio State University by Agricultural Education Graduates. Ph.D., Dissertation, 1955, Ohio State University. (2437)
 86. Taylor, Bob E. An Evaluation of the Pre-Service Professional Training Program in Agricultural Education at the University of Arizona. (Continued on page 262)

Tired of night meetings? Try - - -

Daytime Out-of-School Classes

DUANE EVERRETT, Vo-Ag Instructor, Nehawka, Nebraska



Duane Everett

THE RECENT changes concerning vocational agriculture which are made in Federal Bulletin number one give the states an opportunity to set up shorter periods for the daytime teaching of vocational agriculture. This may result in the high school vo-ag instructor finding himself with additional time available during the school day. Teachers and administrators may find it difficult to justify leaving these periods open.

An item which could be considered is the fact that there are many departments with comparatively small enrollments in vocational agriculture. This being the case, many vo-ag instructors in such schools have chosen or have been asked to teach another subject or to supervise study periods. I feel that we can make more effective use of our time by not engaging in such activities. The vo-ag instructor is a specialist in organizing and teaching classes in agricultural education and should be utilized in this work to the fullest at all times. Devoting a part of the day to the out-of-school programs may be the answer to keeping these instructors as full-time workers in their own field. If a teacher can work adult and young farmer programs into any open daytime periods that grow out of schedule shuffling, there should be little question as to the effective use of his time as a teacher.

Scheduling of adult and young farmer classes can be a problem. In most communities there are a number of local organizations that meet one or more times each month, and prospective, out-of-school students may be members of one or more of these organizations. The meetings of these organizations, combined with the regular schedules of church and school activities, make it difficult for young farmer and adult classes to find time to meet. To combat this problem we scheduled some daytime out-of-school classes.

In order to schedule out-of-school classes in the daytime, one must

look ahead. Prior to beginning the out-of-school classes at Nehawka this past year, I visited with most of the potential class members about the possibility of holding daytime sessions. I then called together a committee from each of the two groups to discuss daytime classes and the organizational meetings. Since the reactions of the potential class members and the class committees were favorable toward the possibility of holding some daytime sessions, I next contacted the school administration relative to the possibility of daytime out-of-school classes. By working with the administration, an arrangement was made whereby high school classes were scheduled in such a manner that I was free early in the afternoon. Next we held the young farmer and adult farmer class organizational meetings at which time the scheduling of classes was discussed. In both cases the idea of afternoon sessions was suggested by some member of the class.

The schedule adopted in our high school was such that I was free at 2:30 p.m. three days each week. Therefore I could easily begin my out-of-school classes by 3:00 p.m. My young farmer class enrollment was 22 and my adult class enrollment was 18. The two groups held a total of 12 daytime class meetings. We had an average of 97 percent of the class membership attend those 12 meetings. Class members found that during the slack season on the farm they could easily come to the afternoon meetings.

As in any schedule, a certain amount of flexibility was necessary. We found it was easy to switch from one afternoon during the week to another but almost impossible to switch evening meetings during the week. Daytime classes also eliminated the possibility of men missing classes simply because their wives did not care to be home alone at night.

I feel that well-spaced meetings could be held at almost any time of the year and be well attended. As an example, during the busy season last



Vo-Ag instructor Duane Everett demonstrates acetylene welding to adult farmer class.

summer, we called together one class for a field trip to the University of Nebraska. Ninety-two percent of the class membership attended.

Yes, there were some problems. We had to switch one of our daytime classes to another afternoon during the same week to eliminate conflict with a funeral which many of the class members wished to attend. Adverse road conditions made it necessary to change another class to a different afternoon. Class members indicated that during the period of adverse road conditions they would rather drive during the daylight hours than in the evening. Undoubtedly this factor contributed to a higher percentage of class attendance.

Examine the possibilities of the daytime out-of-school classes in your department. It will ease the load during the evening hours and very possibly you will have better attendance than at evening classes. Try it. It works! □

Relation between High School - - -

(Continued from page 256)

graduates in respect to the degree of expressed occupational satisfaction. The coded mean of the vocational group was 2.52 compared to a coded mean of 2.42 for the control group. These differences were nonsignificant.

A mean occupational prestige score of 65.60 for the vocational agriculture graduates was comparable to the mean score of 65.22 for the graduates without vocational agriculture training. This difference was nonsignificant.

The mean annual occupational income for the vocational agriculture graduates was \$4645 as compared to \$4420 for the nonvocational agriculture graduates. The difference of \$225 was not statistically significant. □

A Ten-Year Study of Former Students of Vocational Agriculture in Six Reorganized School Districts in Missouri—1946 Through 1955

AMOS B. ROUGEAU, Teacher Education, Arkansas State College

The major purpose of this study was to determine the relationship of training in vocational agriculture to the occupational status of graduates and dropouts from designated school districts.

Importance and Need for the Study

Enrollment in the public schools has been increasing rapidly for the last several years. The total school enrollment in the United States, grades one through twelve, has increased from 30,460,500 in 1955 to 31,500,000 in 1956, an increase of 3.3 per cent. The present number of younger children will raise the total school enrollment to an estimated 41,302,000 by 1965.

Population in the rural farm areas of the United States has been decreasing for the last several years. The total farm population has decreased from 24,001,697 in 1945 to 21,404,000 in 1954, a decrease of 10.9 per cent.

One of the major problems confronting prospective farmers in vocational agriculture is the acute shortage of opportunities in farming. This problem shows evidence of becoming more serious in the immediate future.

This study has been planned to provide information relative to the training and retention of students in the field of vocational agriculture. Information of this nature should be of value to the following groups of workers:

1. Guidance counselors who need information in counseling with prospective farmers and persons interested in related occupations.
2. Agriculture teachers, who, in the training of future farmers, should have an understanding of factors affecting the retention of workers in the occupation.
3. School administrators who should be interested in factors directly affecting the supply of prospective farmers.

In this study an attempt is made to determine what has become of the graduates and drop-outs from Missouri High Schools for the years 1946 through 1955, inclusive. Particular

reference is made to the number engaged in farming, in occupations related to farming, and in other occupations.

Method of Research

A list of 636 graduates and dropouts who completed one or more years of vocational agriculture was compiled from school files in six reorganized districts. Data was collected through personal interviews with 350 available former students within the districts and through an information form received from 190 former students living outside of the reorganized districts.

Definition of Terms

The writer feels that certain terms should be clarified to assure the reader a complete understanding of this study.

A "graduate" is a student who received at least one credit in vocational agriculture and was enrolled in vocational agriculture the year he graduated from high school.

A "dropout" is a student who received at least one credit in vocational agriculture but dropped out of vocational agriculture before graduating from high school. He may or may not have dropped out of school.

"Present employment" means the type of work the person was doing at the time of the study.

Table I—Educational Status of Former Students of Vocational Agriculture

	No. Per Cent	
Graduates who did not attend college	376	59.1
Graduates who attended college	98	15.4
Dropouts	162	25.5
Total	636	100

Educational Status of Former Students

The data in Table I shows the educational status of the former students of vocational agriculture by schools.

Four hundred seventy-four or 74.5 per cent of the 636 former students

of vocational agriculture in the six districts were high school graduates, of whom 98 or 15.4 per cent attended college. One hundred sixty-two or 25.5 per cent were dropouts from vocational agriculture.

Occupational Pattern of Graduates and Dropouts

In Table II is shown the occupational distribution of the former students who still reside in the six districts. A total of 278 or 51.5 per cent of the 540 students resided "within the school districts" and 262 or 48.5 per cent resided "outside the school district."

The occupational distribution of the former students who still reside in the six districts showed 31.2 per cent in farming, 10 per cent in occupations related to farming, and 58.6 per cent in non-farming occupations.

The occupational distribution of former students living outside the school district is shown in Table III. Fifteen and six-tenths per cent of the former students who migrated from the districts were in farming; 1.5 per cent were in occupations related to farming; and 82.8 per cent were in occupations not related to farming.

The related occupations of the graduates and dropouts included employees in feed stores, meat cutters, milk distributors, meat inspectors, implement men, tractor mechanics, hatcherymen, and veterinarians.

Over 70 per cent of the fathers were employed in agriculture and kindred occupations, thirteen per cent were employed in skilled work, 2.8 per cent in professional occupations, and 14 per cent in other occupations.

Of the former students in college, 20.3 per cent were majoring in "agriculture," and 15.2 per cent in "engineering."

The failure of former students to enter and/or remain in farming was attributed to "salaries and other occupations attracted me," and "better chance for advancement in other occupations."

(Continued on page 261)

Why Did Johnny Quit Vocational Agriculture?

Your summer program may be the answer - - -

PHILIP E. SCHMIDT, Vo-Ag Instructor, Oconto, Wis.



Philip E. Schmidt

HAVE your students listed their courses for next fall? Did you discover that Johnny is not taking vocational agriculture? Why? Probably Johnny will tell you that he is not going to be a farmer anyway, so why take vocational agriculture? Accordingly, you accept his reason.

Now don't read any further if none of your students have dropped vocational agriculture. You don't need any help in building a good strong program. The rest of you that have students that drop vocational agriculture after taking it one, two, or three years can read on. But before you blame

the system, let's examine your program with this questionnaire:

- (1) Did you have at least three conferences with his parents during the past years?
 - (2) Did you conduct at least four to six on-the-farm sessions with him?
 - (3) Did he have a satisfactory farming program?
 - (4) Did he participate in FFA activities?
 - (5) Was his class work satisfactory?
- Can you answer "yes" to each of the above questions for each student that dropped from your vocational agriculture program? How many did you answer "maybe" or "no"?

Let us examine some further thoughts about each of these above questions.

Parent Conferences

You probably had a pre-school conference with his parents, but what

after that? Certainly a conference on his farming program was very necessary. How did you develop the improvement program without conferences? Did his parents know the direction in which you were trying to develop the program? You cannot direct this program from your office—get out in the field. You cannot do it alone—so let's use the boy's parents. Parent co-operation is needed for any worth-while program. You are responsible for developing that co-operation. Personal contact is your best tool, so use it.

On-Farm Instruction

How many hours of on-farm instruction did Johnny get? Was it as many as your award winners got? Let's check your record to see how many of your sessions were held during September until June. It's easy to see him in the summer, but during the school year he more often needs them. Were they timed to his needs? Was the quality of your on-farm instruction helpful to him? We need a number of calls to mold a farming program of productive enterprises, improvement enterprises, and approved practices into a complete unit.

(Continued on page 261)

Relation between Home Characteristics of Farm-Reared Male High School Graduates and Their Status in Nonfarm Occupations

CARL WELLS, Graduate Student, Iowa State College



Carl Wells

MANY studies have been conducted in an attempt to evaluate the influence of high school vocational agriculture on the establishment of boys in farming. During the last few years, there has been a decrease in the percentage of farm reared boys who can return to the farm. A majority of the boys who are now receiving vocational agriculture training very probably will not become established in farming. This trend does not reflect a lack of interest in farming; it is largely due to the fact that larger farming units, technological changes and higher initial investments make it difficult for graduates to become established in farming.

The purpose of this study was to evaluate the relationship between the occupational status of farm reared

boys who had dissimilar home characteristics.

This study was one of several made to evaluate the extent to which certain school and home characteristics affected the status of farm-reared boys in occupations other than farming. Five researchers, all graduate students at Iowa State College, worked jointly in developing the questionnaire, visiting the schools involved in the study, and sending questionnaires to the high school graduates.

Method

Forty-five high schools in the central cash grain and eastern livestock area of Iowa which offered vocational agriculture for 11 of the 12 years from 1943 to 1954 were paired with 45 schools which did not offer vocational agriculture during the same period of time. The schools were paired on the basis of location, population of the town, high school enrollment, soil type and, level of living index. Twenty pairs were then drawn at random and used in this study.

The five investigators visited the 40 schools in the study and obtained information from the school records and community. Each investigator obtained the name, present occupation, address, parental farm ownership, rank in class, year of graduation and the number of years of vocational agriculture training of all the farm reared boys who had been graduated between the years 1943 and 1954 inclusive. Questionnaires were then mailed to all former graduates who were in occupations other than farming. After one month approximately 925, or about 75 per cent, of the questionnaires had been returned. The final sample of 320 graduates was selected from approximately 530 questionnaires. All college students, college graduates and servicemen were excluded. An equal number of questionnaires were selected from each school in the study. Of the 320 graduates, 160 had three or more years of vocational agriculture training while in high school and 160 had not had

(Continued on page 262)

Why Did Johnny - - -

(Continued from page 260)

Farming Program

Did he have a challenging program or was it a project to satisfy course requirements? Was it his or his dad's? Did he have an improvement enterprise? How much planning went into the decision of his program? Let's improve our planning sessions with our freshmen next fall to improve their farming programs.

FFA Activities

Did Johnny want to join or did he have to be persuaded? Was he appointed to any committees? Did he like FFA? Did he work for it? Maybe we need to improve our chapter pro-

gram to challenge each member. Let's have each member a part of the program of work. Give each member a job. They do remain in the FFA when they have a role to fill.

Class Work

Did Johnny do average or above average work? Did he feel as one of the class members? Did you make full use of all available outside resources?

Our class activities often determine how a student accepts new procedures on his farm. Each student needs some individual attention. Have class problems that you carry out to his farm. The student that you work with is much more likely to stay with you in the program. Everyone likes individual attention, including students and

parents, so let's give them our best effort.

Look over your summer program and plan to work with the remaining students. Use the need of the parent and student in your on-the-farm instruction. Make your visit constructive, complimenting him on his progress, teaching him something useful, challenging him to do better, and making a date for your next call.

We don't need to work day and night to do it. Plan ahead, make a schedule, send a card, and the student and parents will be waiting for you.

Perhaps after reading this, we should remember—"Don't expect to achieve 100% with 100% of the students." □

A Ten-Year Study - - -

(Continued from page 259)

Turnover and New Farm Operators

In Table IV is shown the distribution of turn over and new farm operators of the six reorganized school districts for the ten-year period 1946 through 1955. Eight hundred and thirty, or 30.9 per cent, of the farm operators were turnover operators, and 1,856, or 69.1 per cent, were new

operators. The number of new operators entering farming during the period 1946 through 1955 was twice as great as the number of turnover operators. Approximately 19,254 farm families, with an average of 3 persons per family, are living within the eleven counties that constitute the six reorganized school districts.

As shown in Table V, when the graduates and dropouts were asked how to prevent dropping out in the

high school, over half of the former students gave as a suggestion "trade school offerings"; 27.5 per cent advised the "addition of a school counselor"; 20, or 5.7 per cent indicated a "better school curriculum"; 7, or 2 per cent, indicated a "good athletic program"; 1, or .3 per cent, indicated "the need for vocational agriculture." This last response was made by a student who transferred to a school where vocational agriculture was not offered.

Twenty seven, or 7.8 per cent, indicated "other reasons." Among these reasons were, "provide young teachers who can counsel with students," "provide jobs for students," "improve teacher understanding of student problems," and "increase home visitation."

Conclusions

1. It may be anticipated that a majority of former students who enter farming will locate close to the areas in which they were reared.

2. The number of placement opportunities in agriculture is insufficient to absorb all former students of vocational agriculture who might prefer to remain in farming.

3. For the most part, the graduates who come from farms will return to their farm families upon leaving high school, whereas only a small percentage will continue in agriculture for any length of time.

4. The number of occupations related to farming in rural communities is insufficient to absorb the rural boys who do not remain on farms.

5. The boys who migrate from their school communities will for the most part enter non-agricultural occupations.

6. The training in vocational agriculture received by former students who enter farming contributes to their progressive establishment in the occupation.

7. With the possible exception of shop work, the training in vocational agriculture received by former students who enter nonfarming occupations was of little vocational value. □

Table II—Occupational Pattern of Graduates and Dropouts Residing in the School Districts

Occupation	Students	
	No.	Per Cent
Farming	87	31.2
Related to farming ...	28	10.0
Professional	2	.7
Non-professional	25	9.3
Not related		
to farming	163	58.6
Professional	4	1.4
Non-professional	159	57.1
Total	278	

Table III—Occupational Pattern of Graduates and Dropouts Residing Outside the School Districts

Occupation	Students	
	No.	Per Cent
Farming	41	15.6
Related to farming ...	4	1.5
Professional	0	0
Non-professional	4	1.5
Not related		
to farming	217	82.8
Professional	0	0
Non-professional	204	77.8
Total	262	

Table IV—Turnover and New Farm Operators of the School Districts, 1946-1955 Inclusive

Type Operator	No.	Per Cent
Turnover operators ..	830	30.9
New operators	1856	69.1
Total	2686	100

Preventing Dropouts**TABLE V—Suggestions Advocated By Former Students to Prevent Dropouts from High School**

Suggestions	Number of Responses		Per Cent
Addition of a school counselor	96		27.5
Better school curriculum	20		5.7
Good athletic program	7		2.0
Trade school offerings	198		56.7
Providing vocational agriculture in school	1		.3
Other	27		7.8
Total	349		100.0

Relation between - - -

(Continued from page 260)

such training. One-half of each group, or 80 graduates, had been graduated from high school during the period 1943 to 1948 and the other 80 had been graduated during the period 1949 to 1954 inclusive.

The three criteria used to study the status of the graduates in occupations were expressed degree of satisfaction, annual earned income, and the score of their occupations according to the North-Hatt Scale of occupational prestige.

Findings

A preliminary study was made to test the influence of parental farm ownership on status. Analysis of variance revealed that sons of land owners and sons of nonowners are no different with respect to their status in nonfarm occupations. Their mean degree of expressed satisfaction and the mean scores of their occupations according to the North-Hatt Scale were virtually the same. There was only \$35 difference in the mean annual earned incomes of the two groups.

An analysis of variance revealed that there was no difference in the occupational status of the graduates who had had and those who had not had vocational agriculture training.

The home characteristics studied were number of acres operated by the parents of the graduates, the age of their fathers, sibling pattern and education of parents. Twenty-four separate correlations were calculated between the three measures of status and the eight home characteristics. All 24 correlations yielded non-significant values.

A highly significant coefficient of correlation between recency of graduation and annual earned income was sufficient to warrant a prediction of annual earned income. Using a quadratic equation for the prediction of annual earned income for years since high school graduation, a maximum annual earned income was attained during the 17th year after high school graduation or at age 35.

A comparison of a study by Rhea of the graduates from Iowa State College in the Division of Agriculture from 1931 to 1952 yielded information which was used in a comparison of the annual earned incomes. The total estimated lifetime earnings for high school graduates was \$237,901 and for the college graduates, \$359,894. The college graduates reached

BOOK REVIEWS

MANAGING SOUTHERN SOILS by H. B. Vanderford. Published by John Wiley and Sons, Inc., 440 Fourth Avenue, New York 16, N. Y. Illustrated, 378 pp., 1957. Price, \$4.75.

Managing Southern Soils was written primarily for the southern states. However, several chapters have nation-wide application. This book contains sixteen chapters which include the major problems in managing soils. It is well written on a high school reading level. The content is supplemented by very good illustrations and by recent research data.

Each chapter is arranged in a manner which will encourage good teaching method. Some very practical suggestions, for classes and individuals, are included in several of the chapters. The use of illustrations and data from many states as well as from several agricultural agencies gives the book a wide and practical application. Land judging and classification are given ample consideration.

This book can be effectively used by vocational agriculture students in their study of soil and water conservation. It should be available in high school libraries. It is also recommended for classes and groups studying the conservation of natural resources.

The author, H. B. Vanderford, is Professor of Soils at Mississippi State College.

—F. E. Kirkley

DAIRY CATTLE JUDGING TECHNIQUES by George W. Trimberger. Published by Prentice-Hall, Inc., 70 Fifth Ave., New York 11, N. Y. 304 pp., illustrated. 1958. Price, \$6.00.

The most successful and widely used method of judging dairy cattle is to compare each animal with a preferred standard or ideal, in all parts of conformation, emphasizing each part according to its importance in the animal's productivity. This system is described in *Dairy Cattle Judging Techniques*.

This book presents a basic and practical guide for everyone interested in judging dairy animals. Emphasis is given to a system of judging which will enable the judge to be precise and definite in rendering a correct decision. The book shows the "whys" of the ideal and the techniques of comparing, observing, and judging dairy cattle. The ideal type for each breed is clearly defined, and full discussion is given to each part of conformation, always stressing the intimate relationship between ideal conformation and high productivity.

their predicted maximum income at age 53. The average annual earned income for high school graduates was \$5,062 and for college graduates, \$8,370. □

Over 400 photographs illustrate nearly every point under discussion. Special emphasis is put on giving precise reasons for placings. A complete list of appropriate descriptive terms is included.

Dr. Trimberger is Professor of Animal Husbandry at Cornell University and a recognized authority and judge of dairy cattle.

—Denver B. Hutson

SOUTHERN HOG GROWING by C. C. Scarborough, edited by M. D. Mobley, Interstate Printers and Publishers, Inc., Danville, Illinois, 1958. 291 pp. Price, \$3.50.

This book was written primarily for youth and adults enrolled in vocational agriculture classes in the South. It deals with jobs and problems connected with the hog enterprise. It was designed to serve as an aid to present and future farmers seeking factual information and the recommendations of specialists in setting up and efficiently carrying on hog production programs. Also included are many practical suggestions for increasing the efficiency of raising and marketing swine. The information presented is summarized at the end of each chapter and appropriate problems and activities are listed at the end of each chapter. These features should prove very helpful to teachers and students who use the book. However, the usefulness of this book is not limited to teachers and students. It is written in easily understandable terms and is well illustrated. It may be used as a practical guide by the individual who desires to solve hog problems or obtain information about the enterprise. Information about sixteen highly important phases (units) is presented and discussed. They are: (1) Planning the Hog Program, (2) The Importance of Hogs in the South, (3) Understanding Hog Feeding, (4) Providing Buildings and Equipment, (5) Preventing Diseases and Parasites, (6) Controlling Diseases, (7) Controlling Internal Parasites, (8) Controlling External Parasites, (9) Feeding Hogs for Market and Slaughter, (10) Marketing Hogs, (11) Butchering Hogs, (12) Problems in Breeding Hogs, (13) Setting Up a Breeding Program, (14) Selecting Breeding Stock, (15) Feeding Breeding Stock, and (16) Caring for Sow and Litter.

Dr. Scarborough is Professor and Head of the Department of Agricultural Education, North Carolina State College.

—B. C. Bass

About the Preparation - - -

(Continued from page 257)

Thesis, M.S., 1953, University of Arizona. (1831)

87. Thede, Clarence John. The Trends in Turnover and Tenure for Teachers of Vocational Agriculture in

(Continued on page 263)

News and Views of the Profession

ROY L. DAVENPORT

Dr. Roy L. Davenport, Director of Resident Instruction, Louisiana State University, College of Agriculture, died suddenly at his home in Baton Rouge on January 28, 1959, at the age of 60.

A native of Auroraville, Wisconsin, Dr. Davenport moved to Baton Rouge in 1916 to enter LSU. He served in the Navy during World War I, returned to LSU and received his B.S. Degree in 1920 and the M.S. Degree from the same institution in 1927. He was awarded the Ph.D. Degree from Cornell University in 1930.

He served on the Louisiana State University faculty for over 35 years as Assistant Professor of Agricultural Education, Associate Professor, Professor and Head of the Department, Director of the School of Vocational Education, Assistant Dean of the College of Agriculture, and Director of Resident Instruction for the College of Agriculture. He established the first collegiate chapter of Future Farmers of America at LSU.

Dr. Davenport was active in professional circles, serving as President of the Louisiana Vocational Association, President of the Vocational Agriculture Section of the Louisiana Education Association, member of the Teacher Education and Certification Committee for Louisiana, member of the U. S. Office of Education Committee on Responsibilities of State Superintendents and Teacher Trainers, and a member of the National Research Committee of the AVA.

As a volunteer, he saw active duty during World War II in the Naval Air Corps, serving as Lt. Commander at bases in Georgia, California, and Hawaii.

He was a member of the following honorary fraternities: Alpha Zeta, Phi Kappa Phi, Phi Delta Kappa, and Alpha Tau Alpha.

Dr. Davenport leaves his wife, the former Frances Turner, a son, Roy L., Jr., and a sister, Mrs. Earl Price, Rockford, Illinois. □

Curriculum Revision Planned

A complete revision of the Suggested Curriculum for Wisconsin Departments of Vocational Agriculture and an extensive revision of the Wisconsin Farming Program Book for Students of Vocational Agriculture are among the activities of the Wisconsin Association of Vocational Agriculture Instructors for this year. Committees of instructors from all parts of the state are being selected by the executive committee to develop the various phases of the program.

The WVAI executive committee met at Marshfield on January 23 and 24 with representatives of the Departments of Agricultural Education at the State Col-

leges at Platteville and River Falls, the University of Wisconsin, and of the Agricultural Division of the State Board of Vocational and Adult Education. Members of the WVAI executive committee are the following instructors in vocational agriculture:

President—Kenneth Wall, Ellsworth; Vice-President—Walter Hansen, Spring Valley; Secretary-Treasurer—M. S. Murray, Cameron; Delegate-at-Large, N. N. Rowe, West Salem.

Executive Committee—Kenneth Kramer, Belleville; Erle E. Barber, Ladysmith; Olaf Pederson, Turtle Lake; Roy R. Koss, Algoma; Millard Gundlach, Montfort; Paul Kreul, Hortonville; Arthur Weiner, West Bend; Francis Steiner, Granton; T. R. Hillert, Tomah. □

Howey NVATA Treasurer



Robert Howey

He received his Bachelor's and Master's degrees from the University of Illinois. He has taught sixteen years at Newark, Illinois, and is in his sixth year in his present location.

He served three years as Vice-President of NVATA from Region IV and was President of NVATA in 1956. During that time, he served three years as a special representative on THE AGRICULTURAL EDUCATION MAGAZINE and four years as a member of the Editing-Managing Board. □

About the Preparation - - -

(Continued from page 262)

- Michigan from 1917-18 Through 1951-52. Nonthesis study for M.A., 1954, Michigan State College. (2045)
88. Thorn, Burton Kellogg. Problems Involved in Production and Use of Appropriate Educational Telecasts by the Michigan Department of Public Instruction. Thesis, Ed.D., 1956, Michigan State University. (2618)
89. Tice, Grady G. In-Service Education of Teachers of Vocational Agriculture in Texas. Thesis, Ph.D., 1953, Louisiana State University. (2047)
90. Timmons, Guy Edward. Follow-Up Evaluation Study of Selected Par-

ticipatory Experiences Gained in Vocational Agricultural Education Training Centers in Michigan. Thesis, Ed.D., 1954, Wayne University. (2441)

91. Tom, Frederick K. T. Characteristics of Meetings Held by County Groups of Teachers of Vocational Agriculture in New York, 1955-56. Staff study, 1956, Cornell University. (2442)
92. Tom, Frederick K. T., and Thompson, Evans G. Current Practices With Respect to Paying Student Teachers During Their Directed Teaching Period, 1955-56. Staff Study, 1956, Cornell University. (2443)
93. Torrence, Andrew P. A Study of the Relationship of Certain Competencies to Success in Teaching Vocational Agriculture. Thesis, Ph.D., 1954, University of Wisconsin. (2244)
94. Wagner, Carl Benjamin. A Study of Professional and Technical Problems of Beginning Teachers of Vocational Agriculture in North Carolina. Problem, M. of Ag. Ed., 1955, North Carolina State College. (2445)
95. White, Conrad Paul. Factors Associated with Certain Abilities Possessed and Jobs Taught in Selected Livestock Enterprises by Teachers of Vocational Agriculture in Michigan. Thesis, Ed.D., 1951, Michigan State College. (1681)
96. Wilson, John Douglas. An Evaluation of the Requirements for a Master's Degree in Agricultural Education at North Carolina State College. Problem Option, M. of Ag. Ed., 1956, North Carolina State College. (2450)
97. Wolf, Willard H. The Influence of Selected Factors Upon the Vocational Choices of Graduates Majoring in Agricultural Education During the Years 1929-1948. Thesis, Ph.D., 1953, The Ohio State University. (1843)
98. Wood, Joseph Gladstone. A Study of the Curriculum in Agricultural Education at the University of Florida. Thesis, M.S., 1952, University of Florida. (1686)
99. Woodin, Ralph James. These Are Our Students. Nonthesis study, 1954. Ohio State University. (2065)
100. Yelton, Roy J. A Comparison of the Activities Carried on by Teachers of Agriculture in the State of Georgia Who Have a Master's Degree With Teachers Who Do Not Have Such a Degree. Thesis, M.S. Ed., 1953, University of Georgia. (2068)
101. Zimmerman, Chester Leroy. Student Evaluation of the Pre-Service Curriculum in Agricultural Education at Ohio State University. Thesis, M.S., 1955, Ohio State University. (2267) □



Ethan J. Randall (right) receives retirement award from past president Clifford Thatcher at the 48th Annual meeting of the Association of Teachers of Agriculture of New York at Cornell University. The final 31 years of the 45 in education were as teacher of vocational agriculture at Skaneateles, New York.



A picture which tells its own story.
(Photo by J. J. Javornik, Vo-Ag Instr.)

Stories In Pictures



Instructors in agriculture judging beef at the Wisconsin Summer Conference. From left to right: Val H. Brungardt, Instructor in Animal Husbandry, U. of Wis.; L. A. Blackburn, Instructor in Agriculture, Berlin; Ray Hoefft, Instructor in Agriculture, Omro; E. A. Hutchinson, Instructor in Agriculture, Clintonville.

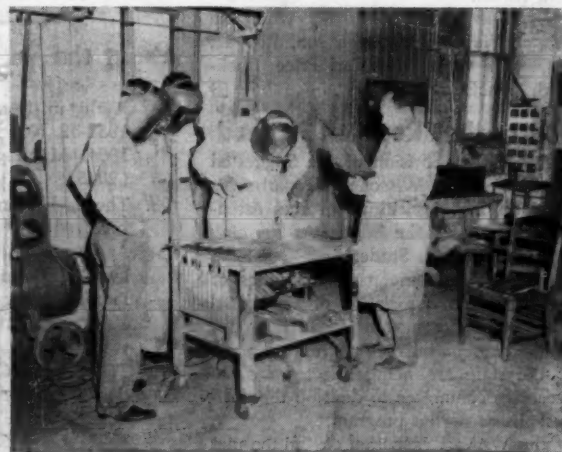


Jimmie Jernagin, National FFA Star Farmer; his wife, Charlene; and his son, Jimmie, Jr., posed before the star symbolic of this highest FFA recognition.



Honorary State Farmers receiving their certificates from the state officers of the Washington Association of Future Farmers of America.

L. to R.: Lloyd J. Andrews—State Superintendent of Public Instruction, Olympia; William Mize—Farmer and Grange Leader from Whatcom County, Bellingham; Herman Praetorius—Chairman, State Board for Vocational Education, Tieton; Paul Slusser—State Board Member and the first Secretary of the Washington Association, Pullman; Wilford Hall—Toppenish, Washington; Darol McWilliams—State Reporter and Gerald Frazier, State Sentinel.



Some Vo-Ag instructors are receiving instruction from John Forrer, welding instructor, during a four-day workshop at the North Dakota Agricultural College.

